



Diploma Supplement

Preamble

The purpose of the Diploma 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. This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO.

1. Information identifying the holder of the qualification

1.1 Last name(s)

TOSONI

1.2 Name(s)

FRANCESCO

1.3 Date of birth(dd/mm/yyyy)

24/09/1995

1.4 Student Identification Number

573499

2. Information identifying the qualification

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

Laurea Magistrale in Informatica e Networking (Computer Science and networking). The holder of this qualification has the right to the title of "Dottore/Dottoressa Magistrale in Informatica e Networking". The above Master Degree is offered by University of Pisa and Scuola Superiore Sant'Anna.
Dottore Magistrale

2.2 Main field(s) of study for the qualification

Computer Science - LM-18
ISCED CODE: 0610

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

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

ENGLISH

3. Information on the level and duration of the qualification

3.1 Level of qualification

2 ° cycle QF-EHEA /7° Level EQF

3.2 Official duration of the programme in credits and/or years

120 CFU/ECTS - Two full time years

3.3 Access requirement(s)

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)
or

First cycle degree (level 6 EQF) or comparable qualification[UNIVERSITY DIPLOMA] (admission and enrolment)

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)
or

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)

Second cycle and single-cycle degree (level 7 EQF) or comparable qualification [Master's Degree] (admission and enrolment)
or

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)

First cycle degree (level 6 EQF) or comparable qualification[Bachelor's Degree] (admission and enrolment)
or

Second cycle and single-cycle degree (level 7 EQF) or comparable qualification [Long cycle degree (Master - 5 years)]



UNIVERSITÀ DI PISA

(admission and enrolment)

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)

or

Second cycle and single-cycle degree (level 7 EQF) or comparable qualification [Long cycle degree (Master - 6 years)]

(admission and enrolment)

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)

or

Second cycle and single-cycle degree (level 7 EQF) or comparable qualification [MASTER'S DEGREE] (admission and enrolment)

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)

or

Second cycle and single-cycle degree (level 7 EQF) or comparable qualification [MASTER'S DEGREE] (admission and enrolment)

Italian secondary school leaving qualification or other comparable foreign qualification (level 4 EQF) [Upper Secondary School diploma (State Exam) or equivalent foreign qualification] (admission and enrolment)

or

First cycle degree (level 6 EQF) or comparable qualification [OTHER FOREIGN ACADEMIC QUALIFICATION] (admission and enrolment)

4. Information on the programme completed and results obtained

4.1 Mode of study:

Full time

4.2 Programme learning outcomes



4.3 Programme details, individual credits gained and grades/marks obtained

Educational activities	CFU/ECTS Credits	Grade	Date	Recognition
HIGH PERFORMANCE COMPUTING	9	30 cum laude	24/01/2018	
FUNDAMENTALS OF SIGNALS, SYSTEMS AND NETWORKS	12	30 cum laude	05/06/2018	
TELETRAFFIC ENGINEERING	9	30 cum laude	28/06/2018	
NETWORK MANAGEMENT AND CONFIGURATION	9	30	09/07/2018	
ALGORITHM ENGINEERING	9	30 cum laude	09/01/2019	
SOFTWARE ENGINEERING	9	30	22/01/2019	
ADVANCED PROGRAMMING	9	30	21/02/2019	
NETWORKING ARCHITECTURES, COMPONENTS AND SERVICES	9	29	18/06/2019	
PACKET SWITCHING AND PROCESSING ARCHITECTURES	6	30	06/09/2019	
WIRELESS NETWORKS OF EMBEDDED SYSTEMS	6	30	11/09/2019	
INFORMATION RETRIEVAL	6	30 cum laude	13/01/2020	
DISTRIBUTED SYSTEMS: PARADIGMS AND MODELS	9	30	29/01/2020	
OVERVIEW OF GUIDANCE FOR THE FINAL	3	Approved	14/02/2020	
FINAL EXAM THESIS	15	Approved	06/03/2020	

Total CFU/ECTS credits: 120

FINAL EXAMINATION
Credits: 1 Date:
Credits: 14 Date: 06/03/2020

THESIS
Title: Algorithms and data structures for efficient ride-sharing platforms
Supervisor: PAOLO FERRAGINA Supervisor: ANDREA MARINO

Legend
CFU Credits

4.4 Grading system and, if available, grade distribution table

For I, II and III cycle programmes the Italian grading system is based on a maximum of 30 points with 18/30 as the lowest passing grade. In case of excellence 30 cum laude may be awarded. Failed exams are not indicated in the student's transcript.

4.5 Overall classification of the qualification

Final mark: 110 cum laude /110 cum laude.
Date: 06/03/2020

For I and II cycle programmes the final grade is based on a maximum of 110 points, with 66/110 as the lowest passing grade. In case of excellence, 110 cum laude may be awarded. The final grade is based on the curriculum as well as on the final exam. For III cycle courses, please refer to the university regulations specific to the course of study.

5. Information On The Function Of The Qualification

5.1 Access to further study

Not available



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5.2 Access to a regulated profession (if applicable)

Not available

6. Additional information

6.1 Additional information

Not available

6.2 Further information sources

www.unipi.itwww.miur.itwww.cineca.itwww.study-in-italy.itwww.cimea.it

7. Certification of the supplement

7.1 Date (dd/mm/yyyy)

01/06/2024

7.2 Name and signature

Dott.ssa Stefania MILELLA
Directorate for Education, Students Affairs and Internationalisation

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



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.quadroititoli.it>

