



DIPLOMA SUPPLEMENT

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

TASCA

1.2 First Name

MARCO

1.3 Date of birth

22/11/1996

1.4 Student identification number or code

285174

2 INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of the qualification and title conferredLaurea Magistrale in DATA SCIENCE AND ENGINEERING
Dottore Magistrale**2.2 Main Field(s) of study for the qualification**COMPUTER SYSTEMS ENGINEERING (LM-32)
ISCED code 0714**2.3 Name and status of the awarding institution**

Politecnico di Torino - Corso Duca degli Abruzzi 24, 10129 Torino, Italy, state university

2.4 Name and status of institution administering studies

Same as in 2.3

2.5 Language(s) of instruction/examination

100% English.

3 INFORMATION ON THE LEVEL AND DURATION OF THE QUALIFICATION

3.1 Level of qualification

Second Cycle QF-EHEA - Level 7 EQF

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

120 ECTS - 2 full time years

3.3 Access requirement(s)

First cycle degree (level 6 EQF) or comparable qualification

4 INFORMATION ON THE PROGRAMME COMPLETED AND THE RESULTS OBTAINED

4.1 Mode of Study

Full-time. Presence. Lectures.

4.2 Programme learning outcomes

Not applicable.

4.3 Programme Details, individual credits gained and grades/marks obtained[See appendix A](#)**4.4 Grading system and, if available, grade distribution table**

For I and II 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.

LM-32 COMPUTER SYSTEMS ENGINEERING			
ISCED CODE: 0714 - II cycle-EQF 7 2020-21 / 2022-23			
Grade	%	Cumulative %	N.marks
18	3.94	100	1751



19	2.32	96.05	1033
20	2.81	93.73	1249
21	3.22	90.92	1431
22	3.71	87.7	1649
23	4.56	83.99	2029
24	5.61	79.43	2494
25	6.3	73.82	2800
26	8.07	67.52	3588
27	9.56	59.45	4248
28	11.13	49.89	4949
29	10.55	38.76	4692
30	14.98	28.21	6661
30L	13.23	13.23	5880
Total marks: 44454			

4.5 Overall classification of the qualification

Graduated on 31/10/2024 with the following grade: 101/110.

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.

LM-32 COMPUTER SYSTEMS ENGINEERING			
ISCED CODE: 0714 - II cycle-EQF 7 2020-21 / 2022-23			
Grade	%	Cumulative %	N.marks
79	0.07	100	1
80	0.15	99.97	2
81	0.15	99.82	2
82	0.07	99.67	1
83	0.22	99.6	3
84	0.15	99.38	2
85	0.51	99.23	7
86	0.29	98.72	4
87	0.51	98.43	7
88	0.8	97.92	11
89	0.58	97.12	8
90	1.16	96.54	16
91	0.58	95.38	8
92	1.02	94.8	14
93	0.94	93.78	13



94	1.16	92.84	16
95	1.82	91.68	25
96	2.11	89.86	29
97	2.69	87.75	37
98	1.82	85.06	25
99	2.91	83.24	40
100	3.13	80.33	43
101	3.2	77.2	44
102	3.63	74	50
103	3.63	70.37	50
104	4.22	66.74	58
105	4.22	62.52	58
106	4.22	58.3	58
107	5.38	54.08	74
108	5.01	48.7	69
109	5.31	43.69	73
110	16.5	38.38	227
110L	21.88	21.88	301
Total marks: 1376			

5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study

Refer to section 8

5.2 Access to a regulated profession

Not applicable.

6 ADDITIONAL INFORMATION

6.1 Additional Information

6.2 Additional Information Sources

University web pages
<http://www.polito.it>

Ministry web pages with description of all accredited Italian Universities programmes and information about Italian higher education

<http://offf.miur.it/>
<http://www.study-in-italy.it/>

NARIC Italia - Information Centre on Academic Mobility and Equivalence
<http://www.cimea.it>

**7 CERTIFICATION OF THE SUPPLEMENT****7.1 Date**

18/07/2025

7.2 Signature

Francesca Maccario

7.3 Capacity

Il dirigente dell'area

7.4 Official stamp or seal**Il Responsabile****Alessandra Berlese**

Signature omitted according to the art.3 paragraph 2 of the Italian legislative decree n. 39, of date 12/02/1993.

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 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.

1st level specializing

These are 2nd cycle programmes intended to provide students with further specialization or higher continuing



Master:

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.

2nd level specializing

Master:

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:

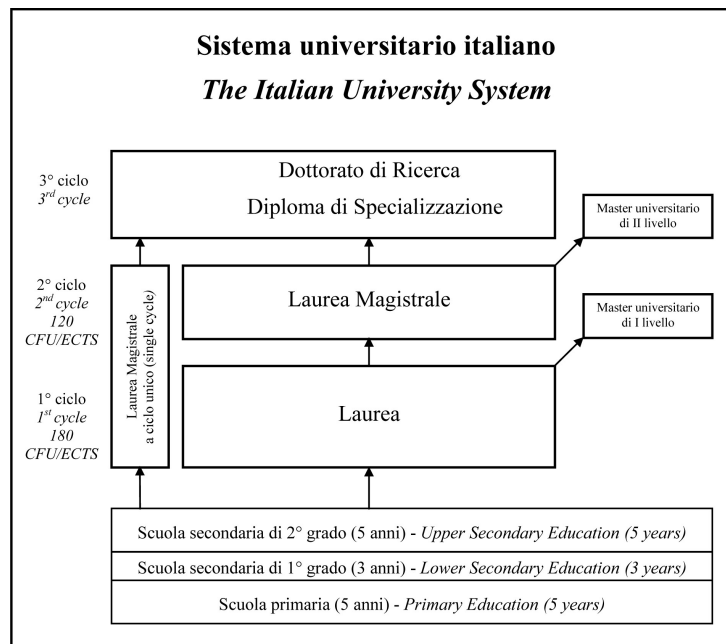
Those who receive the Laurea are entitled to be called "Dottore", the holders of a Laurea Magistrale have a right to the title of "Dottore Magistrale", the Dottorato di ricerca confers the title of "Dottore di Ricerca" or "PhD".

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>



Appendix A ([See 4.3](#))



Code	Educational activities	Date	Grade	CFU/ECTS Credits	Recognition
01TWZSM	Data science lab: process and methods	14/06/2021	26/30	8.0	
01TXFSM	Machine learning and Deep learning	20/07/2021	24/30	10.0	
01TXASM	Data management and visualization	01/09/2021	28/30	8.0	
01TUYSM	Distributed architectures for big data processing and analytics	10/02/2022	24/30	8.0	
01TWWSM	Statistical methods in data science	21/02/2022	28/30	8.0	
01VIXSM	Deep natural language processing	16/06/2022	29/30	8.0	
01URZSM	Data Ethics and Data Protection	15/07/2022	27/30	6.0	
17FWYSM	Internship	18/01/2023	PASSED	12.0	
01TXISM	Innovation management	09/02/2023	23/30	6.0	
01TXLSM	Network Dynamics and Learning	23/02/2024	28/30	8.0	
01TXCSM	Decision making and optimization	26/02/2024	27/30	8.0	
01TXGSM	Mathematics in Machine Learning	26/06/2024	22/30	8.0	
17MBRSM	Thesis	31/10/2024	PASSED	22.0	
Total CFA/ECTS credits				120.0	

Grades distribution [% cumulative]: 30L[13,23], 30[28,21], 29[38,76], 28[49,89], 27[59,45], 26[67,52], 25[73,82], 24[79,43], 23[83,99], 22[87,7], 21[90,92], 20[93,73], 19[96,05], 18[100].

Placement

- Company: IN.TE.SA. SpA
Country: ITALY
Field: METAL CRAFTING
Duration: From 14/11/2022 to 18/01/2023

Final thesis title

Time-Robust and Energy-Efficient Decoder for Real-Time Neural Decoding of Primary Motor Cortex Activity

Supervisor(s)

DI CARLO STEFANO, SAVINO ALESSANDRO, CARPEGNA ALESSIO, VIVIANI PAOLO