

DIPLOMA SUPPLEMENT

This Diploma Supplement follows the model developed by the European Commission, the Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to promote international 'transparency' and the 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 should be free from any value judgements, 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): Orozco Fontalvo
- 1.2 Given Name(s): Mauricio José
- 1.3 Date of Birth (day/month/year): 28/12/1990
- 1.4 Nationality: Colombian
- 1.5 Identification Document:
Passport Number: BG411296
- 1.6 Student Identification Code: ist429073

2. INFORMATION IDENTIFYING THE QUALIFICATION

- 2.1 Name of the qualification and title conferred (in the original language):
Doutoramento em Sistemas de Transportes
Doutor
- 2.2 Main field of study for the qualification:
Transportation Systems
- 2.3 Name and status of the awarding institution (in the original language):
Universidade de Lisboa, Instituição de Ensino Superior Pública
- 2.4 Name and status of the institution that administers the studies (in the original language):
Instituto Superior Técnico, Escola da Universidade de Lisboa
- 2.5 Language(s) of instruction and examination:
Portuguese and English

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

- 3.1 Level of the qualification:
University Education - Doutoramento - Level 8 (EQF)
- 3.2 Official length of the programme:
3 Years / 6 Semesters / 40 weeks of study per year / 180 ECTS Credits
- 3.3 Access requirements:
See section 8.

4. INFORMATION ON THE CONTENTS AND RESULTS OBTAINED

4.1 Mode of study:

Full-time.

4.2 Programme requirements:

The Doutoramento em Sistemas de Transportes consists of 180 ECTS and does not offer any specialisation areas.

The organisation, curricular structure, and the graduation study plan are published in Diário da República at Despacho n.º 7618/2011, DR n.º 100, II Série, de 24/05, Pág. 22374 a 22377.

4.3 Programme details:

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

Academic Year	Curricular Unit	Type	Duration	ECTS Credits	Grades		Obs. (*)
					0-20	ECTS	
2021/2022	Business Models and Contracts	Compulsory	Semestral	6.0	17	B	[i]]
2021/2022	Research Methodologies in Natural and Social Sciences	Compulsory	Semestral	6.0	17	B	[i]]
2021/2022	Simulation Systems for Land-Use / Transport	Compulsory	Semestral	6.0	16	C	[i]]
2021/2022	Transport Demand Modeling	Compulsory	Semestral	6.0	17	B	[i]]
2021/2022	Transport Policy and Institutions	Compulsory	Semestral	6.0	18	A	[i]]
2022/2023	Thesis Project in Transport Systems	Compulsory	Annual	30.0	18	A	[i]]

Observations

[i]] Curricular unit from Universidade de Lisboa, Instituto Superior Técnico

4.4 Grading system:

It is necessary to achieve a minimum grade of 10 on a 0 to 20 scale in each curricular unit for approval.

In the academic years before the student obtained the degree, the overall grading results of this degree's graduates are distributed as follows, according to the national grading scale and its equivalent in the ECTS

Grading Scale:

National Grade	10	11	12	13	14	15	16	17	18	19	20
%	0.0	0.0	0.37	0.92	2.39	5.51	15.62	27.76	32.17	14.71	0.55
ECTS Grade	E	E	E	E	E	E	D	C	B	A	A

4.5 Final grade or qualification:

18 points, Excellent

B (ECTS)

4.6 Thesis grade:

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study:

Not applicable.

5.2 Professional status (if applicable):

Not applicable.

6. ADDITIONAL INFORMATION

6.1 Additional information:

No recognised extracurricular activities.

6.2 Further information sources:

www.ulisboa.pt, www.tecnico.ulisboa.pt, www.naricportugal.pt/naric

7. CERTIFICATION OF THE SUPPLEMENT

7.1 Date (day/month/year): 17/11/2025

7.2 Signature:

7.3 Capacity: President of Instituto Superior Técnico

7.4 Official stamp or seal

Not applicable.

Electronically signed document

This electronic signature, made under powers delegated or subdelegated by the President of the IST on the subscriber, provides full proof to this document, under Portuguese law (Article 376 of the Civil Code and Article 3 of the Decree-Law 290-D/99 of 2 August).

The qualified electronic signature can be validated using Adobe Acrobat Reader as described here:

<https://certifier.tecnico.ulisboa.pt/tutorial>

The document is available at:

<https://certifier.tecnico.ulisboa.pt/71f976cb-81e1-4af6-8d9e-dffde6313cf5>



Alternatively, you can directly access the file by reading the QR code using a camera and a QR code reader application.

8. INFORMATION ON THE PORTUGUESE HIGHER EDUCATION SYSTEM

The Framework Law on the Education System (Law no. 46/86 of 14 October, amended by Law no. 115/97, dated 19 September and Law no. 49/2005, dated 30 August, republished and renumbered in annex to the latter) establishes the general legal framework of the Education System.

The **educational system** comprises three levels: basic, secondary and higher education.

Pre-school education is for children aged between 3 and the age of entering basic education, and is universal for children from the age of 5.

Basic education is universal, compulsory and free and comprises three sequential cycles, the 1st lasting four years, the 2nd lasting two years, and the 3rd lasting three years.

Secondary education comprises a three-year cycle (corresponding to the 10th, 11th and 12th years of schooling) and must be completed by school-aged young people, an obligation that ceases at the age of 18.

National Qualifications Framework

The National Qualifications Framework (QNQ) was adopted in 2009. It comprises the formal qualifications of all education and training subsystems as well as the non-formal qualifications derived from professional experience within the framework of the National Qualifications System. It includes eight levels of qualification, following the levels and descriptors of the European Qualifications Framework (EQF). The QNQ is referenced to the EQF.

Higher Education Structure

Portuguese higher education includes university and polytechnic education.

University education is provided by public and private university institutions while polytechnic education is provided by public and private non-university institutions.

Private higher education institutions are subject to prior recognition by the competent Ministry.

Licenciado degree

Both university and polytechnic education institutions award the degree of *licenciado*.

In polytechnic education, the cycle of studies leading to the degree of *licenciado* normally lasts six curricular semesters corresponding to 180 ECTS credits. In exceptional cases covered by national or European Union legislation, it may last up to seven or eight curricular semesters with up to 240 ECTS credits of student work.

In university education, the cycle of studies leading to the degree of *licenciado* ranges from 180 to 240 ECTS credits, and normally lasts from six to eight curricular semesters.

In the 1st cycle of studies the degree of *licenciado* is awarded to those who pass all the course units of the *licenciatura* study programme, therefore obtaining the required number of credits.

The degree of *licenciado* corresponds to the level 6 of the QNQ and EQF.

Mestre degree

Both university and polytechnic education institutions award the degree of *mestre*. The cycle of studies leading to the degree of *mestre* ranges from 90 to 120 credits, and normally lasts from three to four curricular semesters. In exceptional circumstances resulting from a stable and consolidated practice in that specific field at international level, it may amount to 60 ECTS credits and last two semesters.

In polytechnic education, the cycle of studies leading to the *mestre* degree must ensure predominantly that the student acquires a professional specialization. In university education, the cycle of studies leading to the *mestre* degree must ensure mainly that the student acquires an academic specialization through research, innovation or development of professional competences.

In university education, the *mestre* degree may also be awarded upon completion of an integrated cycle of studies, ranging from 300 to 360 ECTS credits and usually lasting 10 to 12 curricular semesters, in cases where the access to the practice of a certain professional activity depends on that length of time in accordance with European Union legal standards or results from a regular practice consolidated within the European Union. Within this cycle of studies, the degree of *licenciado* is awarded to those who have obtained 180 ECTS credits corresponding to the first six curricular semesters.

In the 2nd cycle of studies, the degree of *mestre* is awarded to those who have passed all the course units of the *mestrado* study programme, and who have publicly defended an original dissertation, project work or traineeship report, therefore obtaining the required number of credits.

The *mestre* degree corresponds to the level 7 of the QNQ and EQF.

Doutor degree

The *Doutor* degree is awarded by universities and university institutes to those who have passed all the course units of the *Doutoramento* study programme, when applicable, and who have publicly defended an original thesis. It may also be awarded on account of a coherent and relevant set of research works or, in the field of the arts, on a work or a set of works or achievements.

The *doutor* degree corresponds to the level 8 of the QNQ and EQF.

Cursos Técnicos Superiores Profissionais

The *técnico superior profissional* diploma is awarded upon completion of a non-degree higher education cycle of studies entitled *curso técnico superior profissional* (CTeSP). It corresponds to a short cycle of studies within the cycle of studies leading to the *licenciado* degree.

The CTeSP are provided by polytechnic higher education institutions as well as polytechnic organic units integrated in universities.

The CTeSP have 120 ECTS credits and normally last four curricular semesters including general, scientific and technical

subjects, as well as a training period at the workplace.

Other diplomas

Higher education diplomas may also be awarded following the partial completion of a cycle of studies. In such cases, the chosen title must differ from the title of the final award of the applicable degree.

Diplomas may also be awarded for non-degree courses, some of which are regulated, e.g. postgraduate specialization courses in Nursing or supplementary courses in Nursing or Teaching.

Access conditions

Admission to higher education institutions is subject to *numerus clausus*.

Admission to the first cycle of studies

General regime

National and foreign students wishing to apply to the 1st cycle of studies leading to the *licenciado* degree through the general regime must fulfil the following conditions:

- Have successfully completed a secondary education course or a national or foreign qualification legally equivalent;
- Have taken the entrance exams required for the programme the student wishes to attend with a mark equal or higher than the minimum required (there are higher education institutions that accept foreign tests or exams);
- Have fulfilled the prerequisites (when applicable) of the programme the student wishes to attend.

An annual competition is held by the Directorate-General for Higher Education for admission to public higher education through the general regime.

Institutional competitions are held for admission to private higher education through the general regime.

Special conditions

Besides the *regime geral* (general regime), there are special conditions that apply to top-level athletes, Portuguese citizens on an official mission abroad, national or foreign diplomatic staff, permanent staff of the Portuguese Armed Forces, and scholarship holders within the framework of cooperation agreements agreed by Portugal.

An annual competition is held by the Directorate-General for Higher Education for admission to public higher education through the special conditions.

Special competitions

Besides the general regime and the special conditions, there are special competitions for applicants holding specific qualifications, thus opening higher education to new publics in a lifelong learning perspective, namely:

- Applicants over 23 years old who have passed special exams for assessing their capacity to attend higher education;
- Holders of other higher education courses, *técnico superior profissional* diplomas, and *diploma de especialização*

tecnológica (a post-secondary course certificate);

- Holders of the *licenciado* degree wishing to apply to Medicine;
- International students.

In addition, students who have been or are registered and enrolled in higher education are allowed to apply for readmission or to opt for another institution/programme pairing.

The special competitions for applying to higher education are held by higher education institutions.

Admission to the second cycle of studies

Those who meet the following conditions may apply to the 2nd cycle of studies leading to the *mestre* degree:

- Holders of the *licenciado* degree or legal equivalent;
- Holders of a foreign academic degree duly recognised as satisfying the objectives identical to the *licenciado* degree by the relevant scientific body of the higher education institution they wish to be admitted to;
- Holders of an academic, scientific or professional *curriculum vitae* that is recognised as attesting to the capacity to carry out this cycle of studies by the relevant scientific body of the higher education institution they wish to be admitted to.

The relevant bodies of each higher education institution are responsible for the regulations, application requirements and selection criteria for admission to this cycle of studies.

The access and admission to the integrated cycle of studies leading to the *mestre* degree are governed by the norms applicable to the access and admission to the 1st cycle of studies leading to the *licenciado* degree.

Admission to the third cycle of studies

Those who meet the following conditions may apply to the 3rd cycle of studies leading to the *doutor* (doctor) degree:

- Holders of a *mestre* (master) degree or legal equivalent;
- Holders of a *licenciado* degree who have a particularly relevant academic or scientific *curriculum vitae* that is recognised as attesting the capacity to carry out this cycle of studies by the relevant scientific body of the higher education institution they wish to be admitted to.
- Holders of an academic, scientific or professional *curriculum vitae* that is recognised as attesting the capacity to carry out this cycle of studies by the relevant scientific body of the higher education institution they wish to be admitted to.

The relevant bodies of each higher university or university institute are responsible for the regulations, application requirements and selection criteria for admission to this cycle of studies.

Admission to CTESP

Those who meet the following conditions may apply to a CTESP:

- Holders of a secondary education course or legal equivalent;

- Applicants aged over 23 who have passed the special exams for assessing their capacity to attend higher education required for a particular course;
- Holders of *diploma de especialização tecnológica, técnico superior profissional* diploma or of a degree wishing to undergo reskilling.

The specific conditions to apply for a *técnico superior profissional* course are set by higher education institutions, according to the field of the course.

The competitions are held by higher education institutions.

Classification system

The *técnico superior profissional* diploma, as well as the *licenciado* and *mestre* degrees are assigned a 10-20 final classification on a numerical scale from 0 to 20, as well as its equivalent in the European scale of comparability of classifications.

The academic degree of *doutor* is assigned a final classification pursuant to the regulating standards approved by the awarding university or university institute.

WHERE APPLICABLE

Former higher education structure

Degree programmes

Prior to Law no. 49/2005, dated 30 August, and ensuing adoption of the regulatory principles for the creation of the European Higher Education Area:

- The degrees of *bacharel, licenciado, mestre* and *doutor* were awarded in university education;
- The degrees of *bacharel* and *licenciado* were awarded in polytechnic education;
- Diploma to *licenciatura* programmes, organised in two stages, the first leading to the *bacharel* degree and the second to the *licenciado* degree, could be provided in polytechnic education. The first stage lasted six semesters and the second lasted two to four semesters;
- The programmes leading to the *bacharel* degree usually lasted three years, but under certain conditions could be one or two semesters shorter;
- The programmes leading to the *licenciado* degree usually lasted four years, but under certain conditions could be one to four semesters longer;
- The programmes leading to the *mestre* degree had a maximum length of four semesters;
- Degree programmes were not assigned a given range of ECTS credits.

The former degrees remain valid as there is no matching mechanism or automatic conversion from the former to the current degrees.

The degrees and diplomas prior to the Bologna Process implementation were given the following correspondences within the framework of the QNQ:

- The *bacharel* and *licenciado* degrees correspond to level 6;
- The *mestre* degree corresponds to level 7;
- The *doutor* degree corresponds to level 8.

Cursos de Especialização Tecnológica

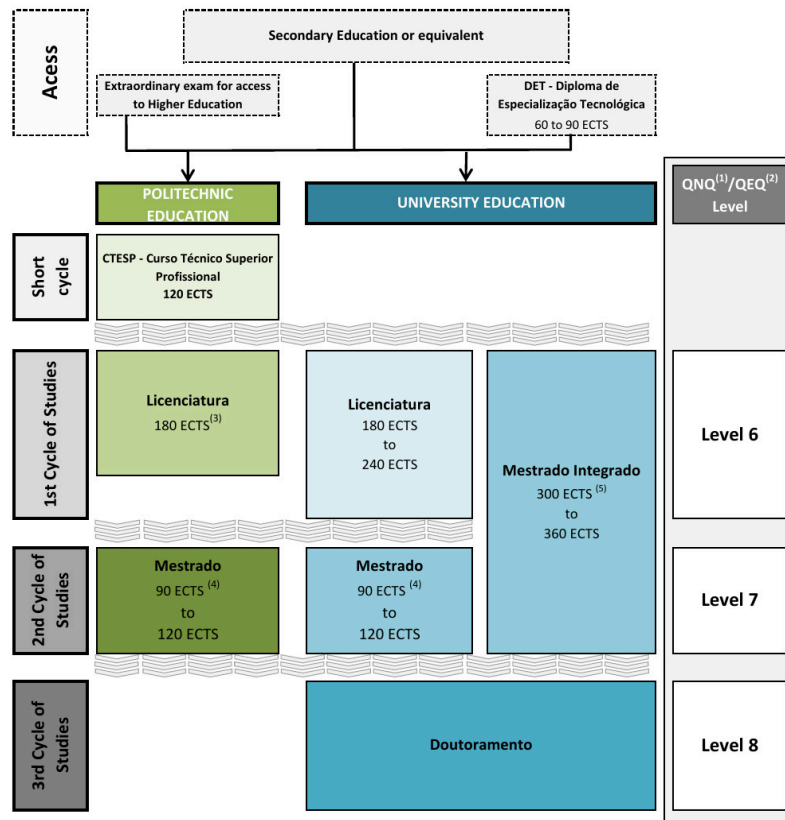
Higher education institutions were given

the deadline of 31 December 2016 to conclude the provision of post-secondary courses aimed at specialized professional training, entitled *Cursos de Especialização Tecnológica* (CET).

The CET range from 60 to 90 ECTS credits and include subjects in general, scientific and technical areas, as well as a training period at the workplace.

The completion of a CET implies a technological specialization certificate providing a level 4 professional qualification, in accordance with Council Decision 85/368/CEE of 16 July, which corresponds to a level 5 qualification within the framework of the QNQ.

Portuguese Higher Education System



⁽¹⁾ QNQ - National Qualifications Framework.

⁽²⁾ QEQ - European Qualifications Framework.

⁽³⁾ Except when in order to exercise a certain professional activity requiring education and training ranging between 210 and 240 ECTS.

⁽⁴⁾ In exceptional circumstances, a cycle of studies leading to a Mestre degree in a specialized field may have 60 ECTS credits, resulting from a stable and consolidated practice in that specific field at international level.

⁽⁵⁾ A Mestre degree may also be awarded following an integrated cycle of studies, for access to a professional activity, if the length: a) is established by European Union regulations; b) results from a regular and consolidated practice within the European Union; in such cases, a Licenciado degree is awarded to students having obtained 180 ECTS credits (3 years, 6 semesters).