



AGREEMENT ON DOUBLE MASTER DEGREE PROGRAMME

BETWEEN

INSTITUTO SUPERIOR TÉCNICO (PORTUGAL)

AND

UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (ITALY)

Preamble

Within the framework of the Cooperation Agreement signed between Instituto Superior Tecnico and Università degli Studi di Napoli Federico II, and sharing the common purpose to develop academic and scientific cooperation between the two institutions by fostering mobility among master students,

Instituto Superior Técnico (hereafter **Técnico Lisboa**), with legal domicile at Avenida Rovisco Pais, 1049-001 Lisboa, Portugal, and represented by its President, Professor Rogério Colaço,

and

Università degli Studi di Napoli Federico II (hereafter **UNINA**), with legal domicile at Corso Umberto I, 80138, Napoli (Italia), and represented by its Rector Matteo Lorito

hereby agree to set up a Double Master Programme(s) according to the following articles:

Article 1 – Aim of the Agreement

This Agreement defines the requirements and obligations of Técnico Lisboa and UNINA in establishing Double Master's Degree Programmes in specific *thematic fields*. Each programme requires the satisfaction of admission and graduation requirements at both institutions. Based on this academic structure each institution will grant a separate academic degree bearing only its name, seal, and signature.

Article 2 – Scope of the Agreement

The present agreement concerns the delivery of Master Degrees. The degrees delivered will be detailed in the specific Annexes.

Article 3 – Student Admission

The admission of students to the programme will be conducted in accordance with the following principles:

- a) The parties shall agree on the application procedure, including application deadlines and selection criteria;
- b) The students must meet the admission criteria of the Master's programme of both institutions and comply with the terms and conditions of the present Agreement;
- c) Students must be well versed in the English language, as demonstrated by an official language certificate or equivalent;
- d) The selection is carried out in collaboration between the two institutions. The home institution is responsible for providing the host institution with a list of selected and eligible candidates. The final decision on admission of nominated students is made by the host institution;

Article 4 – Rights and obligations of the Students

Each student has to comply with the rules and regulations of the host country and host institution.

Students participating under this Agreement shall be enrolled as degree students. Students shall have the same rights and obligations than the students of the host institution. They will be entitled to participate in any introductory program that may customarily be arranged for foreign students.

Students will fulfil at least one full academic year of Master studies in each institution.

Article 5 - Rights and obligations of the parties

The host institution will support students in preparing the documents needed to obtain the visa (if applicable) and in finding appropriate accommodation.

The responsible offices of the institutions have the right to ask the incoming students to respect the regulations of the host institution and reserve the right to ask the students to return to the home institution if the students refuse to follow the regulation of the host institution.

Students and teachers participating in the program must be covered by a health insurance policy of sickness, hospitalization, accident, repatriation and civil liability at the time of participation in the program. In case the coverage they have thanks to their student or teacher position were

not sufficient in regard to the needs stated above, it will be mandatory the stipulation of an adequate additional individual insurance policy for participation in the program.

Article 6 – Study Plan and Final Degree Project (Master’s Thesis)

Individual study plan for the total duration of the mobility program, including the Master’s thesis must be set up and approved by both institutions before admission of the student. The individual study plan may be revised at any time with consent from both home and host institutions.

The thesis work will be equivalent to a minimum of one semester of full-time work. The Master’s thesis must be carried out under the supervision of a Faculty member of the host institution and a faculty member of the home institution and, normally, at the host institution. Deviations from this provision may be decided by mutual and written consent between the two institutions on a case-by-case basis.

The Master’s thesis should be presented in the host institution. The jury of the thesis should be composed by faculty members from both institutions.

The Master’s thesis is written in English.

Article 7 - Control of results and transcripts of records

The parties agree that exams/courses will be graded, and credits awarded according to the rules of the institution where the exam/course is carried out.

The host institution will communicate the results of each student in terms of credits and grades (transcripts of records) to the home institution at regular time intervals.

Each institution grants the student credit transfer from the other institution according to its own applicable rules, laws and regulations.

Article 8 - Delivery of the academic degrees

Students successfully completing their studies of the Master’s Degree Programme obtain two degrees, one issued by the home institution and one issued by the host institution.

Each institution will issue a Diploma and a Diploma Supplement.

Article 9 – Tuition fees, insurance and other expenses

No tuition fees are required at the host institution for students participating in the Programme. The students shall pay tuition fees to their home university.

Exchange students are not exempted from various university and student fees and costs for additional services that result from their sojourn at the host institution.

All travel, living, and miscellaneous expenses incurred by attending host institution, including health insurance, meals, transportation, and lodging, shall be the responsibility of the student.

Article 10 - Academic and Administrative Representatives

Each institution will nominate academic and administrative representatives for the Programme. These representatives shall be responsible for the follow-up of the Programme within their Institutions and for ensuring that measures are taken in accordance with this Agreement. The persons (and designated offices of the institutions) will be in contact with the students for the entire mobility period, and will verify, upon student's return, that the procedures for academic recognition of activities developed at the host institution have a successful conclusion.

Article 11 - Intellectual Property and Confidentiality

11.1. The intellectual property rights over the results of the research activity developed within this Agreement shall be ruled in accordance with the applicable legislation of the countries of the home and host institutions.

11.2. In case any invention, work or creation is developed as a result of the research activity carried out within the present Agreement, the provisions set out in this Clause shall apply.

11.3. The intellectual property rights over any invention, work or creation developed as a result of the research activity carried out within the present Agreement shall vest in the institution whose inventors, authors or creators have contributed to the development of such invention, work or creation and the owner institution shall be free to use and exploit it as it deems fit.

11.4. Where inventors, authors or creators from both institutions have jointly contributed to the development of the invention, work or creation, the intellectual property rights over such invention, work or creation shall be jointly owned by the institutions. Their share of ownership shall reflect the contributions made by their inventors, authors or creators. If the percentages of contribution cannot be ascertained, the shares of ownership of the institutions shall be considered equal.

11.5. For the purposes of this Clause, the student shall be considered inventor, author and creator of their home institution.

11.6. The institutions shall communicate reciprocally in case they are informed by the respective inventors, authors or creators of the existence of results susceptible of registration.

11.7. In case of joint ownership, as defined in accordance with paragraph 4, the institutions shall conclude a joint ownership agreement where all matters related to the submission, maintenance, costs, licensing, transfer and own use of the intellectual property rights shall be defined. The joint owners shall refrain from any and all acts that may prevent the constitution, defense and exploitation of the rights until such agreement is concluded. They shall namely refrain from their commercial exploitation and disclosure.

11.8. Copyright over the MSc dissertation developed in the scope of the MSc Programme shall be vested exclusively in the student.

11.9. The final written dissertation developed in the scope of the MSc Programme shall not contain missing fragments and must consist in a coherent text, all of this aiming at the dissertation fulfilling the following requirements: (1) being the basis for the attribution of the degree; (2) being an adequate public statement of the reasons for the attribution of degree.

11.10. Information that one of the parties deems as confidential shall be included in a confidential annex to the written dissertation, and distributed to the jury members only.

11.11. The institutions commit themselves to filing the confidential annexes at a reserved deposit for a minimum period of five years, and this period may be extended without restrictions, except for those arising from the general law, to any other period, as long as that is required by one of the parties.

Article 12 - Duration of the Agreement

This Agreement shall come into effect from the academic year following the day of signature by both institutions, it will be valid for five (5) years and will be extended for similar periods upon written agreement of the parties.

It may be terminated at any time by either party upon 90 (ninety) days written notice to the other party. Termination of the agreement is subject to the completion of the activities in progress.

Article 13 - Amendments or changes

Amendments or changes to this Agreement shall be made in written form and signed by the duly authorised representatives of the institutions. All activities in effect at the time of such notices shall be permitted to be completed in the same manner as if no such notices were given.

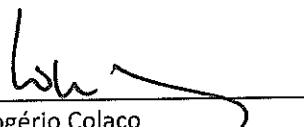
The parties agree to solve amicably any controversy arising from the interpretation or execution of the present Agreement. In case the controversy cannot be resolved, the claim will be submitted for arbitration by a panel where each party appoints a member and both parties chose a member by mutual consent.

Laws and regulations of each country will take precedence over any clauses or language of this agreement.

This agreement is drafted in English, it has been signed in duplicate, and each institution holds a copy.

For the Instituto Superior Técnico

For the Università degli Studi di Napoli
Federico II



Prof. Rogério Colaço
President

Prof. Matteo Lorito
Rector

Date: 05/09/2023

Date:



APPENDIX I:
AGREEMENT ON DOUBLE MASTER DEGREE PROGRAMME
BETWEEN
INSTITUTO SUPERIOR TÉCNICO (PORTUGAL)
AND
UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (ITALY)

Duration: Academic Year 2022/23 to 2027/2028

Degree programme at	Técnico Lisboa
Degree awarded	Master Degree in Civil Engineering
Language of instruction	English
Admission requirements	A completed Bachelor's Degree (180 ECTS) in Civil Engineering or related areas, such as Mechanical, Environmental, Geological, Mining and Energetic Resources Engineering.
Number of students	5
Academic Year Start	September
Degree programme at	UNINA
Degree Awarded	Master Degree in Structural and Geotechnical Engineering

Language of instruction	English and Italian
Admission requirements	A completed Bachelor's Degree (180 ECTS) in Civil Engineering or related areas
Number of students	5
Academic Year Start	September

The applicants must provide proof of their proficiency in English (at least a B2 level), e.g.

- via an internally recognized test such as TOEFL or IELTS, accepted university tests
- a Bachelor degree from a University where English is the only language of instruction
- a certificate from the home university stating that the applicant's proficiency in English is adequate for advanced studies with English as the language of instruction

A study plan has to be set up for each individual student and it has to be approved by the program directors for both masters.

All the degrees will be awarded at the end of the formation, once the student has finished all the required courses at both institutions

Nominations and applications:

For students from UNINA to Técnico Lisboa the nomination and complete application documents must be sent to Técnico Lisboa by April 15th of the previous academic year.

For students from Técnico Lisboa to UNINA the nomination and complete application documents must be sent to UNINA by April 15th of the previous academic year.

The selection is carried out in collaboration between the two institutions. The home institution is responsible for providing the host institution with a list of selected and eligible candidates. The selection of students under the present Agreement is always subject to the final approval by the host institution.

Schematic Study Plan

A. UNINA students studying at Técnico Lisboa

Year	Institution	Studies	Remarks
1	UNINA	Mandatory and elective courses	60 ECTS
2	Técnico Lisboa	Mandatory and elective courses + Master dissertation	30 ECTS + 30 ECTS

B. Técnico Lisboa students studying at UNINA

Year	Institution	Studies	Remarks
1	Técnico Lisboa	Mandatory and elective courses	60 ECTS
2	UNINA	Mandatory and elective courses + Master dissertation	30 ECTS + 30 ECTS

Detailed syllabus of Masters

Detailed syllabus is given because as students from different background can be accepted to enrol at both masters, depending on their bachelor, it would be more advisable to follow some specific courses to avoid repetition of previous learning.

Students enrolling in the Master degree in Civil Engineering can select one of the following five specialization areas: (i) Construction; (ii) Geotechnics; (iii) Hydraulics and Water Resources; (iv) Structures; and (v) Urban planning, Transports and Systems.

Técnico Lisboa: Master degree in Civil Engineering - specialization in Construction

Semester	Courses	ECTS credits
1	Concrete Structures I	6
1	Transport Infrastructures	6
1	Geotechnical Structures II	6
1	Steel Structures I	3
1	Buildings Construction Technology	6
1	Construction Organization and Management I	3
2	Structural Design	6
2	Sanitary Engineering	6
2	Construction Pathology and Rehabilitation	6
2	Construction Organisation and Management II	3
2	Option 1 (Digital Technologies in Civil Engineering Composites for Civil Engineering Structures Masonry and Timber Structures Modelling of Geotechnical Structures Built Environment Impact Free Optional or Minor)	6
2	Option 2 (Free Optional Entrepreneurship and Business Extracurricular Activities I)	3
3	Building Services	6
3	Construction Materials II	6
3	Construction Planning and Control	6
3	Option 3 (Comfort and Energy Use in Buildings Protection, Repair and Strengthening Materials Free Optional or Minor)	6
3	Option 4 (Construction and Real Estate Economics Construction Life Cycle Free Optional or Minor)	6
4	MSc dissertation in Civil Engineering	30

Técnico Lisboa: Master degree in Civil Engineering - specialization in Geotechnics

Semester	Courses	ECTS credits
1	Concrete Structures I	6
1	Transport Infrastructures	6
1	Geotechnical Structures II	6
1	Steel Structures I	3
1	Buildings Construction Technology	6
1	Construction Organization and Management I	3
2	Structural Design	6
2	Sanitary Engineering	6
2	Geotechnical Earthquake Engineering	6
2	Geotechnical Characterisation and Observation	3
2	Option 1 (Digital Technologies in Civil Engineering Composites for Civil Engineering Structures Masonry and Timber Structures Modelling of Geotechnical Structures Built Environment Impact Free Optional or Minor)	6
2	Option 2 (Free Optional Entrepreneurship and Business Extracurricular Activities I)	3
3	Numerical Methods in Geotechnics	6
3	Option 3 (Landfill Structures Special Foundation)	6
3	Option 4 (Excavations and Retaining Structures Underground Space)	6
3	Option 5 (Landfill Structures Special Foundations Free Optional or Minor)	6
3	Option 6 (Excavations and Retaining Structures Underground Space Free Optional or Minor)	6
4	MSc dissertation in Civil Engineering	30

Técnico Lisboa: Master degree in Civil Engineering - specialization in Hydraulics and Water Resources

Semester	Courses	ECTS credits
1	Concrete Structures I	6
1	Transport Infrastructures	6
1	Geotechnical Structures II	6
1	Steel Structures I	3
1	Buildings Construction Technology	6
1	Construction Organization and Management I	3
2	Structural Design	6
2	Sanitary Engineering	6
2	Hydraulic Works	6
2	Hydropower Systems	3
2	Option 1 (Digital Technologies in Civil Engineering Composites for Civil Engineering Structures Masonry and Timber Structures Modelling of Geotechnical Structures Built Environment Impact Free Optional or Minor)	6
2	Option 2 (Free Optional Entrepreneurship and Business Extracurricular Activities I)	3
3	Hydraulics and Maritime Works	6
3	Water Resources Modelling and Planning	6
3	Water and Wastewater Treatment Plants	6
3	Option 3 (Urban Drainage and Pollution Control Free Optional or Minor)	6
3	Option 4 (Fluvial Hydraulics and Rehabilitation Free Optional or Minor)	6
4	MSc dissertation in Civil Engineering	30

Técnico Lisboa: Master degree in Civil Engineering - specialization in Structures

Semester	Courses	ECTS credits
1	Concrete Structures I	6
1	Transport Infrastructures	6
1	Geotechnical Structures II	6
1	Steel Structures I	3
1	Buildings Construction Technology	6
1	Construction Organization and Management I	3
2	Structural Design	6
2	Sanitary Engineering	6
2	Concrete Structures II	6
2	Steel Structures II	3
2	Option 1 (Digital Technologies in Civil Engineering Composites for Civil Engineering Structures Masonry and Timber Structures Modelling of Geotechnical Structures Built Environment Impact Free Optional or Minor)	6
2	Option 2 (Free Optional Entrepreneurship and Business Extracurricular Activities I)	3
3	Structural Dynamics and Earthquake Engineering	6
3	Option 3 (Steel and Composite Structures Finite Elements Bridges)	6
3	Option 4 (Structural Buildings Structures Rehabilitation and Repairing Special Structures)	6
3	Option 5 (Steel and Composite Structures Finite Elements Bridges Free Optional or Minor)	6
3	Option 6 (Structural Buildings Structures Rehabilitation and Repairing Special Structures Free Optional or Minor)	6
4	MSc dissertation in Civil Engineering	30

Técnico Lisboa: Master degree in Civil Engineering - specialization in Urban planning, Transports and Systems

Semester	Courses	ECTS credits
1	Concrete Structures I	6
1	Transport Infrastructures	6
1	Geotechnical Structures II	6
1	Steel Structures I	3
1	Buildings Construction Technology	6
1	Construction Organization and Management I	3
2	Structural Design	6
2	Sanitary Engineering	6
2	Urban Planning	6
2	Elements of Urban Engineering	3
2	Option 1 (Digital Technologies in Civil Engineering Composites for Civil Engineering Structures Masonry and Timber Structures Modelling of Geotechnical Structures Built Environment Impact Free Optional or Minor)	6
2	Option 2 (Free Optional Entrepreneurship and Business Extracurricular Activities I)	3
3	Data Analysis and System Evaluation	6
3	Option 3 (Transport Infrastructures Maintenance Railway Engineering Road Traffic Engineering Planning and Management of Urban Mobility Freight Transport and Logistics)	6
3	Option 4 (Transport Infrastructures Maintenance Railway Engineering Road Traffic Engineering Planning and Management of Urban Mobility Freight Transport and Logistics Solid Waste Management Urban Management and Real Estate Economics Environmental and Land Use Planning Projects and Contracts)	6
3	Option 5 (Transport Infrastructures Maintenance Railway Engineering Road Traffic Engineering Planning and Management of Urban Mobility Freight Transport and Logistics Free Optional or Minor)	6
3	Option 6 (Transport Infrastructures Maintenance Railway Engineering Road Traffic Engineering Planning and Management of Urban Mobility Freight Transport and Logistics Solid Waste Management Urban Management and Real Estate Economics Environmental and Land Use Planning Projects and Contracts Free Optional or Minor)	6
4	MSc dissertation in Civil Engineering	30

UNINA University: Master Degree in Structural and Geotechnical Engineering

Semester	Courses	ECTS credits
1	Fondazioni or Static and seismic foundation design	9
1	Dinamica delle costruzioni ed ingegneria sismica or Earthquake engineering and structural control	9
1	Course from Table B	9
2	Teoria e progetto delle costruzioni in c.a. or Design and retrofit of r.c. constructions (1S) or Teoria e progetto delle costruzioni in acciaio or Theory and design of steel constructions	9
2	Analisi limite delle strutture or Limit analysis of structures	9
2	Course from Table B	9
3	Consolidamento delle strutture in c.a. or Progetto e consolidamento di strutture in muratura or Strutture speciali e progetto di strutture resistenti al fuoco or Teoria e progetto di ponti	9
3	Opere di sostegno or Dinamica dei terreni e geotecnica sismica	9
$\frac{3}{4}$	Course from Table A3	9
$\frac{3}{4}$	Course from Table B	9
4	Traineeship	9
4	Ms dissertation	12

Table A1	Geotechnical Engineering	
1	<i>Static and seismic foundation design</i>	9
2	Stabilità dei pendii e sicurezza del territorio (LM Ingegneria per l'Ambiente ed il Territorio)	9
2	Geotecnica delle infrastrutture	9
2	Consolidamento dei terreni e delle rocce	9
3	Opere di sostegno	9
3	Dinamica dei terreni e geotecnica sismica	9
4	Indagini e monitoraggio geotecnico	9
4	<i>Tunnels and underground structures</i>	9
4	<i>Geotechnical modelling</i>	9

Table A2	Mechanical Engineering	
2	Analisi strutturale con gli elementi finiti	9
2	Modellazione strutturale	9
3	<i>FEM in nonlinear structural analysis</i>	9
3	<i>Mechanics of composite and advanced materials</i>	9
4	Analisi sperimentale dei materiali e diagnostica delle strutture	9

Table A3	Structural Engineering	
1	Complementi di Tecnica delle Costruzioni	9
2	Teoria e progetto delle costruzioni in c.a.	9
2	Teoria e progetto delle costruzioni in acciaio	9
2	<i>Theory and design of steel constructions</i>	9
3	Consolidamento delle strutture in c.a.	9
3	Progetto e consolidamento di strutture in muratura	9
3	Strutture speciali e progetto di strutture resistenti al fuoco	9
3	Teoria e progetto di ponti	9
3	Costruzioni in legno	9
3	Diagnosi e terapia dei dissesti strutturali	9
3	<i>Design and retrofit of r.c. constructions</i>	9
4	Strutture prefabbricate	9
4	Sistemi informativi per le costruzioni (BIM)	9
4	<i>Advanced metallic structures</i>	9
4	<i>Innovative building materials</i>	9
4	<i>Structural reliability</i>	9

Table B	A1+A2+A3 further to the following courses	
1/3	Modelli e metodi numerici per l'ingegneria	9
1/3	Rischi geologici nella progettazione di opere d'ingegneria civile	9
2/4	<i>Advanced applied engineering mathematics</i>	9
2/4	Geologia applicata	9
2/4	Project Management per le opere civili	9



Contacts

Academic responsible for the programme Master in Civil Engineering at Técnico Lisboa Prof. António Sousa Gago	Academic responsible for the programme Master in Structural and Geotechnical Engineering at UNINA Prof. Emidio Nigro
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Signatures

Date:	Date:
For the Técnico Lisboa	For the UNINA
Name: Rogério Colaço	Name: Matteo Lorito
Position: President	Position: Rector