



# Università degli Studi di Ferrara

DE Department of Engineering Ferrara

# **Double Degree Program – Master in Civil Engineering @ ECN & UNIFE** Implementation and procedures

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15/02/2024	M	aster in Civil Engineering @ ECN & UNIFE 1

## **General information about the Double Degree**

Double Degree Program – Master in Civil Engineering @ ECN & UNIFE

Master de Sciences, Technologies, Santé, mention Génie Civil Ecole Centrale de Nantes (ECN) France

https://www.ec-nantes.fr/study/masters/materials-and-structures-in-their-environment

Laurea Magistrale in Ingegneria Civile - Indirizzo Costruzioni Engineering Department, University of Ferrara (UNIFE) Italy

https://corsi.unife.it/lm-ing-civile

Kick off: AY 2024-2025

Number of students admitted each year: 4

Language level recommended: B1 in English & Italian

**General information about the Double Degree** 

Double Degree Program – Master in Civil Engineering @ ECN & UNIFE **Program:** 

1<sup>st</sup> year at the home University

2<sup>nd</sup> year at the partner University + Master thesis

Master Defense at both partner & home Universities

Professional qualification is not required in France

<u>Professional qualification can be achieved in Italy</u> <u>after an additional State Examination</u>

## **General information about the Double Degree**

Double Degree Program – Master in Civil Engineering @ ECN & UNIFE

#### Financial support for UNIFE students

Applicants ranked 1<sup>st</sup> and 2<sup>nd</sup> will receive the **Eramus+ mobility contribution** (€ 300/month for 10 months) and the **Erasmus+ Student Status** <u>https://erasmus-plus.ec.europa.eu/it</u>

Applicants ranked 1<sup>st</sup> and 2<sup>nd</sup> will receive the **"Fondo Giovani" mobility contribution** (€ 300-400/month for 10 months) by MUR <u>https://www.mur.gov.it/</u>

Applicant ranked 1<sup>st</sup> will receive an additional scholarship funded by the Engineering Department of the University of Ferrara (3000 €) <u>https://de.unife.it/it</u>

#### Financial support for ECN students

Applicants will receive the **Eramus+ mobility grant** (~ 300€/month) and the **Erasmus+ Student Status** <u>https://erasmus-plus.ec.europa.eu/fr</u> Double Degree Program – Master in Civil Engineering @ ECN & UNIFE

## Implementation and procedures

- This document tries to describe the implementation process of the double degree (DD) agreement, looking especially at students' point of view
- Person in charge of the DD are:
  - **Prof. Alessandra Aprile @ ENGINEERING DEPARTMENT of UNIFE**
  - Prof. Giulio Sciarra @ INSTITUT DE RECHERCHE EN GÉNIE CIVIL ET MÉCANIQUE (GEM) of ECN
- Special attention has been paid to dates and people in charge of the different required procedures
- We will consider that the mobility period ranges years N and N+1 (eg. 2024-2025), such that year N-1 would be 2023, and so on.

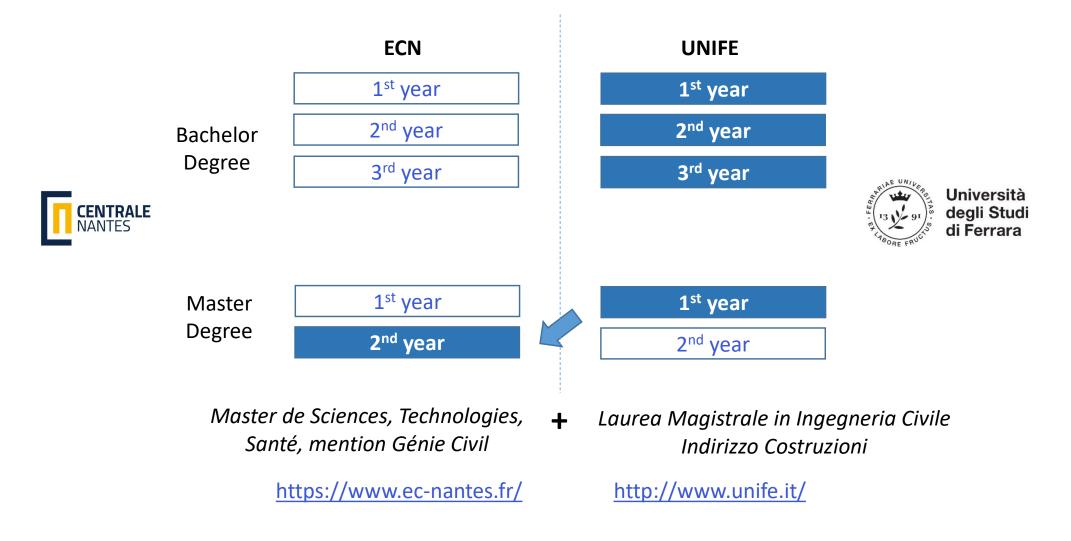
## ECN & UNIFE Students at home and partner University

#### General framework of the double degree

YEAR	Università di Ferrara Laurea Magistrale in Ingegneria Civile <i>Percorso Costruzioni</i>	Ecole Centrale de Nantes Master de Sciences, Technologies, Santé, Mention: Génie Civil, Parcours: Matériaux et Structures dans leur Environnement	ECTS
1 <sup>st</sup>	Course taken at students' home institution		60
<b>2</b> <sup>nd</sup>	<ul> <li>Courses taken at UNIFE</li> <li>transferrable to ECN</li> <li>Thesis</li> </ul>	<ul> <li>Courses taken at ECN</li> <li>transferrable to UNIFE</li> <li>Thesis</li> </ul>	60
		Total ECTS	120



Academic pathway of UNIFE students



## **UNIFE students** @ ECN Global equivalence table of the 1<sup>st</sup> year

Courses attended at UNIFE		Courses transferred to ECN	
Title	ECTS	Title	ECTS
	12	Fluid Mechanics 1	5
Costruzioni Idrauliche (B)		Physical Modelling	4
		Algorithmics for Engineering Modeling	4
	9	Business Environment	4
Valutazione progetti immobiliari (C)		Language course (French)	2
		Language course (French)	2
		Conferences	-
	9	Numerical Methods	5
Calcolo numerico e laboratorio (D)		Mathematical Methods in Civil Engineering	4
Maccapica dolla Struttura (P)	0	Continuum Mechanics	5
Meccanica delle Strutture (B)	9	Constitutive Laws	5
Geologia dei terremoti (C)	9	Geotechnical Engineering	5
		Imaging in Civil Engineering	5
Riabilitazione Strutturale (B) – odd yrs	0	Concrete and Structures	5
9Tecnica delle Costruzioni 2 (B) – even yrs	3	Vibrations and Differential Equations	5
Total ECTS	57	Total ECTS	60

#### Global equivalence table of the 2<sup>nd</sup> year

Courses attended at ECN	Courses transferred to UNIFE		
Title	ECTS	Title	ECTS
Design and Behaviour of Modern Concrete	4	Tagaina dalla Castruciani (D)	12
Numerical Analysis	5	Tecnica delle Costruzioni (B)	
Mechanics of Porous Media	5		
Homogenization Methods in Heterogeneous Media	4	Geotecnica (B)	12
Earthquake Engineering	4	Dragattaziona in zona ciemica (D)	9
Language course (French)	2	Progettazione in zona sismica (B)	
Statistics of Materials and Structural Reliability	4	Drogotti di Strutturo (D)	0
Project	2	Progetti di Strutture (B)	9
Master Thesis or Industrial Internehin	30	Tirocinio	6
Master Thesis or Industrial Internship		Esame finale	12
Total ECTS	60	Total ECTS	63

Requisites and selection process

- Requisites will be defined in the official call every academic year (N-1,N)
  - 1. Complete a bachelor degree or equivalent at their home university

 $\rightarrow$  Laurea Triennale in Ingegneria Civile e Ambientale (Before Sep N-1)

- 2. Students have successfully completed the **first year** of the master program at home university (Laurea Magistrale in Ingegneria Civile) (N-1,N)
- **3. Required knowledge of instruction language at host university (English– B1 level recommended):** Students selected for the double degree program must have a sufficient linguistic level to undertake studies at the receiving institution. The host university held the right to refuse applicants if they do not meet these conditions.

#### Selection process

- Based on academic results of the student
- Motivational interview

#### What students must know and steps required

#### Mobility during academic year [N,N+1]

Item	Description	Dates	Responsible body	Comments
1	Launching of the call of the double degree agreement for academic year [N,N+1] (UniFe->ECN)	February (year N)	Bilateral Commission of the Agreement	Publishing and disseminating
2	Assessment and selection of students	March (N)	Home Faculty/School (UNIFE)	
3	Submission of the list of selected students	April (N)	Home Faculty/School (UNIFE)	
4	Pre-registration on the master degree	June (N)	Any student interested in the agreement	Inform students
5	Mobility period	September (N) – June (N+1)		
6	Master Thesis Defense @ECN	End of August (N+1)	Host Faculty/School (ECN)	
7	Master Thesis Defense @UNIFE	October (N+1)	Home Faculty/School (UNIFE)	
8	Transcript of records	November (N+1)	Home &Host Faculty/School (ECN & UNIFE)	
9	Issue of the university degrees	December (N+1)	Home &Host Faculty/School (ECN & UNIFE)	

More options about the MSc thesis defence

MSc Defence @ ECN	MSc Defence @ UNIFE
August (N+1)	October (N+1)
	December (N+1)
	February (N+2)
	March (N+2)

#### **PAY ATTENTION!**

The first semester exams will be taken at **the beginning of January (N+1)** with a second call at the beginning of February (N+1).

The second semester will be entirely spent for traineeship and Ms thesis work.

Master Thesis (Final Project) at ECN Information about the procedure at the following link: https://etudiant.ec-nantes.fr/englishversion/thesis-internship

- Proposal of master thesis (Application form), approved by the Master Thesis Supervisor – online procedure (January N+1)
- The Ms thesis is developed during the stage period of 6 months (average salary of 600 €/month, provided by the company or the research lab)
- Hand out the document (English) to the supervisor –
   1 week before the thesis defense
- 4. Oral Presentation (in English) to an assessment committee 6 months after step 1



## Some pics of ECN

















## ECN – Some info and Teaching staff

- Professors and Research associates ~ 70
- Research activity: each year ~300 peerreviewed papers in international journals & conferences
- Master courses in Civil, Mechanical Engineering, Marine Technologies, Control & Robotics, Industrial Engineering, City & Urban Environment
- Students  $\sim 2.000$
- Employment rate of graduates: 73% after 6 months







## Some people

**Dr. Jean-Baptiste Avrillier Director of ECN** 



Prof. Ahmed Loukili Head of GEM

**Prof. Giulio** Coordinator of Master de Sciences, Technologies, Santé, mention Génie Civil

**Prof. Vincent Frémont** Coordinator of International Relations

## The city of Nantes

#### $\approx$ 320.000 inhabitants















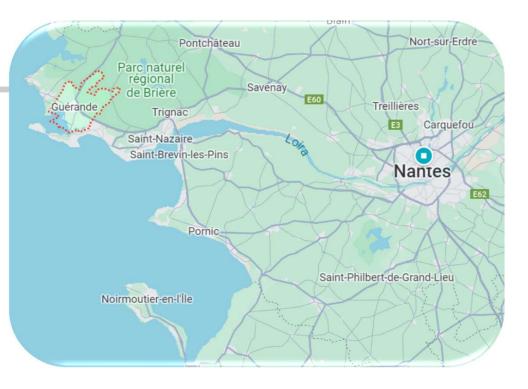
## Nantes surroundings

#### The natural environment





#### **Pecherie Saint Nazaire**



#### Ile de Noirmoutier



15/02/2024

### How to get to Nantes from Ferrara

By plane...



1. Train, bus or car from Ferrara to Bologna airport ( $\sim$  1h)



Fly from Bologna airport to Nantes airport
 (~ 5h of flight time with 1 flight stop)



3. Bus from Nantes airport to Centrale Nantes (~ 1h)

## **OBLIGATIONS**

- 1. Fees are due to home University only
- 2. Health and liability insurances are subscribed at host University
- 3. Behaviour rules are set by host University and Country



## CONTACTS





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<u>STUDENTI UNIFE ALL'ESTERO:</u> <u>https://classroom.google.com/c/NDM4NTkwNzk1ODEy?cjc=se66xq3</u>





# **MERCI BEAUCOUP**

# **GRAZIE MILLE**

