

# MULTIPHASE

## ERASMUS MUNDUS

### JOINT MASTER DEGREE

Multiphase Systems for  
Sustainable Engineering



MULTIPHASE  
MASTER

ERASMUS MUNDUS

[www.multiphase-master.eu](http://www.multiphase-master.eu)



Politecnico  
di Torino

RÉPUBLIQUE  
FRANÇAISE  
1800  
Faculté  
Perronet



Institut Mines-Télécom

Technical  
University  
of Munich



## ● ABOUT US

We offer an Erasmus Mundus master in the booming field of Multiphase Systems : with the ambition of educating a new generation of industrial experts, engineers, and researchers, to bring the Chemical Industry into a new age based on sustainable processes, the circular economy and all the potential of digital tools.

It will help fill the skill shortage gap via the combination of strong research, excellent teaching, novel didactics concepts, and intersectorality with a strong industrial involvement.

## ● QUICK FACTS

### STUDIES

- Small cohorts:  
30 students approx.  
Studying 2 years together
- 3 Master's degrees from  
Top ranked universities:  
Institut Mines-Telecom (IMT),  
Politecnico di Torino (PoliTo)  
and Technische Universität  
München (TUM)
- 2-year International Master  
Programme (120 ECTS)
- 2 Application seminars
- 1 Winter school

### CAREER PATH

- Opening to PhD careers
- Highly qualified positions  
in industry such as R&D port-  
folio manager
- Academia

### INTERNATIONAL

- All courses are  
taught in English
- Dedicated Welcome Week  
and student support










### STRONG CONNECTION TO INDUSTRY AND RESEARCH

- Partnership with  
19 industrial companies  
(among which BAYER, VEOLIA,  
CONTINENTAL, ORANO)
- 1 Project carried over the 2  
years with one of the partners  
(the student can choose a  
Technical or Economical topic)
- On-site visits
- Job fair with  
industrial partners




## MAIN TARGETED STUDENTS

CHEMICAL ENGINEERING  
MECHANICAL ENGINEERING  
PHYSICS  
CHEMISTRY

## ● PROGRAMME OVERVIEW AND MOBILITY SCHEME

SEMESTER 1 	SEMESTER 2 	SEMESTER 3 	SEMESTER 4
 			<b>MASTER THESIS</b>
<b>FUNDAMENTALS</b>	<b>TECHNOLOGY</b>	<b>MODELING</b>	<b>MASTER THESIS</b>
<ul style="list-style-type: none"> <li>• Equalization</li> <li>• Theoretical foundations</li> <li>• Physics and chemistry of dispersed systems</li> </ul>	<ul style="list-style-type: none"> <li>• Industry-oriented</li> <li>• Processes and technologies with multi-phase systems</li> <li>• Special focus on sustainable processes</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced numerical modeling foundations</li> <li>• Optimization of existing processes or design of innovative ones</li> </ul>	<ul style="list-style-type: none"> <li>• Application of knowledge and know-how</li> <li>• In industry or academia</li> <li>• Write a master Thesis</li> </ul>

## ● ELIGIBILITY



-  You have or expect to have a Bachelor of Science degree or an equivalent academic qualification
-  You are in the top 25% of your class
-  You have a proven proficiency in English

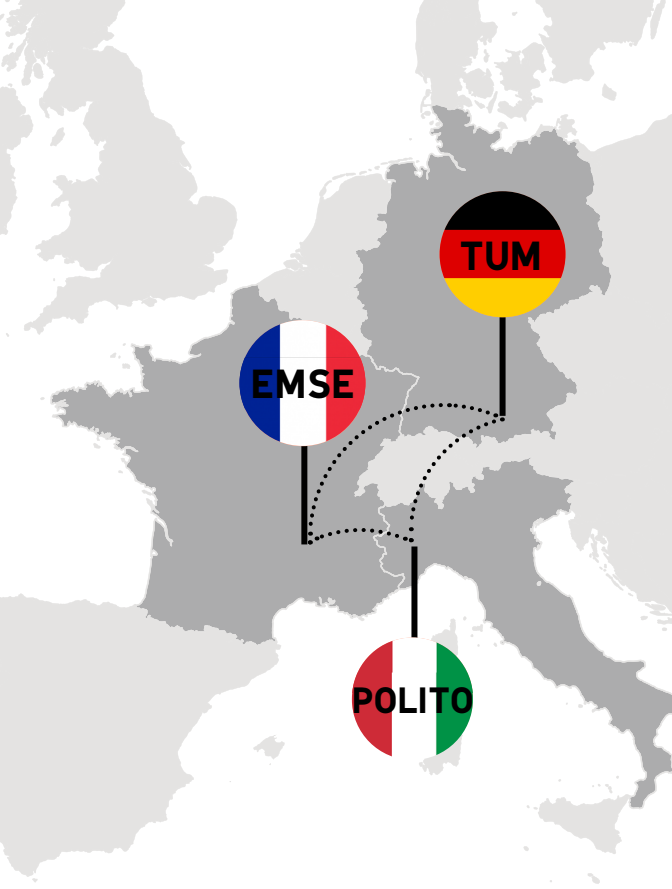
## ● SCHOLARSHIPS (EVERY YEAR)

- **Erasmus Scholarship:** participation fees funded + €1400 / month grant
- **Consortium Scholarship:** participation fees reduced to €2000 (for 2 years)
- **Self-funding:** participation fees of €9000 (for 2 years)

## ● AGENDA

### CAMPAIGN

- START**  NOVEMBRE 2, 2024
- END**  JANUARY 31, 2025  
@ 23H59 PM PARIS TIME



Mines Saint-Étienne

Politecnico di Torino

Technische Universität  
München



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**Co-funded by  
the European Union**



**Politecnico  
di Torino**



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