

The (MIR) Marine and Maritime Intelligent Robotics Master, innovatively combines Robotics and Artificial Intelligence in the context of advancing marine and maritime science and their technological applications.

- ➔ DOUBLE MASTER'S DEGREE
- ➔ TEACHING IN ENGLISH
- ➔ INDUSTRY EXPERIENCES
- ➔ ERASMUS MUNDUS SCHOLARSHIPS
- ➔ RESEARCH EXCELLENCE
- ➔ EMPLOYMENT OPPORTUNITIES
- ➔ GLOBAL NETWORK OF 50+ INDUSTRY AND RESEARCH PARTNERS



## MIR COORDINATION OFFICE

### MSc in Marine and Maritime Intelligent Robotics

University of Toulon

CS 60584

83041 TOULON CEDEX 9

FRANCE

mundus-mir@univ-tln.fr

mir-candidate@univ-tln.fr

## MIR DIRECTOR

Assoc. Prof. Ricard Marxer

Head of DYNI Team (LIS lab)

## INTERNATIONALISATION OFFICER – ASSOCIATE PARTNERS

Mrs. Céline Barbier

## EDUCATION MANAGER

Prof. Vincent Hugel

Head of COSMER lab

## MIR PEDAGOGICAL SECRETARY

Mrs. Célia Cau

*The MIR consortium consists of 50+ industry and research partners in 21 countries with which MIR students have the possibility to conduct their thesis and can continue on to do a PhD.*



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

Co-funded by the  
Erasmus+ Programme  
of the European Union



MIR

MARINE &  
MARITIME  
INTELLIGENT  
ROBOTICS



RECEIVE AN INTERNATIONAL  
DOUBLE MASTER'S DEGREES  
FROM 2 LEADING EUROPEAN  
PARTNER UNIVERSITIES

UNIVERSITÉ DE  
TOULON

NTNU

UNIVERSITAT  
JAUME I

TÉCNICO  
LISBOA

## MIR PROGRAMME

4 SEMESTRES / 120 ECTS

### IN THE FIRST YEAR

#### Semester 1 and semester 2

In France at the University of Toulon (UTLN) students will acquire a solid background in Marine Science, Robotics and Artificial Intelligence.

### IN THE SECOND YEAR

#### Semester 3

In Spain at UJI, or in Norway at NTNU, or in Portugal at IST-UL.

#### Semester 4

is devoted to a Master's thesis in the context of a research or industry internship.



## 3 STUDY TRACKS

	SEMESTER 1 30 ECTS	SEMESTER 2 30 ECTS	SEMESTER 3 30 ECTS	SEMESTER 4 30 ECTS
	TEACHING UNITS			
<b>Study track 1</b> <b>APPLIED ROBOTICS FOR UNDERWATER INTERVENTION MISSIONS</b>	<ul style="list-style-type: none"> <li>Marine science &amp; environment</li> <li>Artificial Intelligence</li> <li>Robotics</li> </ul>	<ul style="list-style-type: none"> <li>Transversal skills (reliability &amp; risk assessment, AI fairness &amp; transparency, etc.)</li> <li>AI &amp; robotics, and its applications taught by UTLN and guest lecturers</li> <li>Joint introduction to study track specialisations (UJI, NTSU, IST)</li> <li>Industry led seminars (options)</li> <li>Entrepreneurship industry &amp; research project</li> </ul>	<b># UNDERWATER INTERVENTIONS</b>  UJI	Thesis with principal supervision at UJI or an associated partner
<b>Study track 2</b> <b>SAFE AUTONOMOUS SUBSEA OPERATIONS</b>			<b># DEEP SEA OPERATIONS</b>  NTNU	Thesis with principal supervision at NTNU or UTLN or an associated partner
<b>Study track 3</b> <b>COOPERATIVE MARINE ROBOTICS FOR SCIENTIFIC &amp; COMMERCIAL APPLICATIONS</b>			<b># COOPERATIVE ROBOTICS</b>  IST	Thesis with principal supervision at IST or an associated partner
	UTLN	UTLN		
<div>Induction weeks (2 weeks induction with joint industry introduction days)</div> <div>MIR Joint Annual Symposium &amp; Championship (1 week to be held at a different partner each year)</div> <div>MIR Joint Annual Symposium &amp; Championship (1 week to be held at a different partner each year)</div>				