

### III. OTRAS DISPOSICIONES

#### UNIVERSIDADES

- 13654** *Resolución de 25 de julio de 2022, de la Universidad Jaume I, por la que se publica el plan de estudios de Máster Universitario Erasmus Mundus en Robótica Inteligente Marina y Marítima/Erasmus Mundus Master in Marine and Maritime Intelligent Robotics [Máster conjunto de la Universidad Jaume I, Norges TekniskNaturvitenskapelige Universitet (Noruega), Universidade de Lisboa (Portugal) y Université de Toulon et du Var (Francia)].*

Obtenida la verificación del plan de estudios por el Consejo de Universidades, previo informe favorable de la Agencia Nacional de Evaluación de la Calidad y Acreditación, así como la autorización de las comunidades autónomas correspondientes, y establecido el carácter oficial del título por Acuerdo de Consejo de Ministros de 28 de diciembre de 2021 (publicado en el BOE de 15 de enero de 2022),

Este Rectorado, de conformidad con lo dispuesto en el artículo 35 de la Ley Orgánica 6/2001, de Universidades, en la redacción dada por la Ley Orgánica 4/2007, ha resuelto publicar el plan de estudios conducente a la obtención del título de Máster Universitario Erasmus Mundus en Robótica Inteligente Marina y Marítima/Erasmus Mundus Master in Marine and Maritime Intelligent Robotics [Máster Universitario conjunto de la Universidad Jaume I de Castellón, Norges TekniskNaturvitenskapelige Universitet (Noruega), Universidade de Lisboa (Portugal) y Université de Toulon et du Var (Francia)].

El plan de estudios a que se refiere la presente Resolución quedará estructurado conforme figura en el anexo de la misma.

Castellón de la Plana, 25 de julio de 2022.—La Rectora, Eva Alcón Soler.

#### ANEXO

**Plan de estudios conducente a la obtención del Máster Universitario Erasmus Mundus en Robótica Inteligente Marina y Marítima/Erasmus Mundus Master in Marine and Maritime Intelligent Robotics [Máster Universitario conjunto de la Universidad Jaume I de Castellón, Norges TekniskNaturvitenskapelige Universitet (Noruega), Universidade de Lisboa (Portugal) y Université de Toulon et du Var (Francia)]**

*Estructura de las enseñanzas*

1. Rama de conocimiento: Ingeniería y Arquitectura.
2. Distribución del plan de estudios en créditos ECTS, por tipo de materia.

Tipo de materia	Créditos
Obligatorias (OB).	60
Optativas (OP).	30
Trabajo de final de Máster (TFM).	30
Total.	120

## 3. Contenido del plan de estudios.

Materia	Asignatura	Carácter	Créditos	Curso
UTLN - Scientific Writing Skills and Methods.	UTLN - Scientific Writing Skills and Methods.	OB	1	1
UTLN - Deep Learning.	UTLN - Deep Learning.	OB	3	1
UTLN - Machine Learning.	UTLN - Machine Learning.	OB	3	1
UTLN - Modeling of Marine Systems.	UTLN - Modeling of Marine Systems.	OB	2,5	1
UTLN - Underwater Acoustics.	UTLN - Underwater Acoustics.	OB	2	1
UTLN - Reinforcement Learning.	UTLN - Reinforcement Learning.	OB	3	1
UTLN - Control Theory of Multivariable Linear Systems.	UTLN - Control Theory of Multivariable Linear Systems.	OB	5	1
UTLN - Geometric, Kinematic and Dynamical Modeling of Robotic Systems.	UTLN - Geometric, Kinematic and Dynamical Modeling of Robotic Systems.	OB	2,5	1
UTLN - Design Thinking and Project Management.	UTLN - Design Thinking and Project Management.	OB	3	1
UTLN - Fundamentals of Marine and Coastal Processes.	UTLN - Fundamentals of Marine and Coastal Processes.	OB	5	1
UTLN - Risk and Reliability Engineering and AI Potencial.	UTLN - Risk and Reliability Engineering and AI Potencial.	OB	1	1
UTLN - Legislation on International Water an Autonomous Vehicles.	UTLN - Legislation on International Water an Autonomous Vehicles.	OB	1	1
UTLN - Fairness, Accountability and Transparency in AI.	UTLN - Fairness, Accountability and Transparency in AI.	OB	1	1
UTLN - Marine Mechatronics.	UTLN - Marine Mechatronics.	OB	2,5	1
UTLN - Advanced Control for Autonomous Vehicles.	UTLN - Advanced Control for Autonomous Vehicles.	OB	3	1
UTLN - Optimization Techniques.	UTLN - Optimization Techniques.	OB	3	1
UTLN - Data-driven Machine Perception.	UTLN - Data-driven Machine Perception.	OB	3	1
UTLN - Adaptive Autonomous Robotic Behaviour.	UTLN - Adaptive Autonomous Robotic Behaviour.	OB	2,5	1
UTLN - Marine Localisation and Mapping.	UTLN - Marine Localisation and Mapping.	OB	1,5	1
UTLN - Explanaible AI.	UTLN - Explanaible AI.	OB	1	1
UTLN - Underwater Interventions.	UTLN - Underwater Interventions.	OB	1,5	1
UTLN - Autonomy in Subsea Operation.	UTLN - Autonomy in Subsea Operation.	OB	1,5	1
UTLN - Cooperative Robotics.	UTLN - Cooperative Robotics.	OB	1,5	1
UTLN - Deep-sea Drones and Missions.	UTLN - Deep-sea Drones and Missions.	OB	2	1
UTLN - Underwater Acoustic Sensors.	UTLN - Underwater Acoustic Sensors.	OB	1	1
UTLN - Entrepreneurship - Industry and Research Project.	UTLN - Entrepreneurship - Industry and Research Project.	OB	2	1
UTLN - Intelligent Robotics for Seabed Resources Exploitation.	UTLN - Intelligent Robotics for Seabed Resources Exploitation.	OB	1	1
UTLN - Artificial Intelligence and Shipping.	UTLN - Artificial Intelligence and Shipping.	OB	1	1
IST-UL - Embedded Computational Systems.	IST-UL - Embedded Computational Systems.	OB	6	1
UJI - Perception and Manipulation.	UJI - Perception and Manipulation.	OB	4	2
UJI - Spanish as a Foreign Language.	UJI - Spanish as a Foreign Language.	OB	2	2
UJI - Multi-robot Systems.	UJI - Multi-robot Systems.	OB	4	2
UJI - Cognitive Processes.	UJI - Cognitive Processes.	OB	4	2

Materia	Asignatura	Carácter	Créditos	Curso
UJI - Wireless Comunication.	UJI - Wireless Comunication.	OB	4	2
UJI - Telerobotics and HRI.	UJI - Telerobotics and HRI.	OB	4	2
UJI - Robotic Intelligence.	UJI - Robotic Intelligence.	OB	4	2
UJI - Simulation, Middleware and Benchmarking.	UJI - Simulation, Middleware and Benchmarking.	OB	4	2
NTNU - Marine Control Systems, Specialization Course.	NTNU - Marine Control Systems, Specialization Course.	OB	7,5	2
NTNU - Marine Control Systems, Specialization Project.	NTNU - Marine Control Systems, Specialization Project.	OB	7,5	2
NTNU - Decision Making under Uncertainty for Autonomous Systems.	NTNU - Decision Making under Uncertainty for Autonomous Systems.	OB	7,5	2
NTNU - Research-based Innovation Methodologies in Computer and Information Science.	NTNU - Research-based Innovation Methodologies in Computer and Information Science.	OB	7,5	2
IST-UL - Optimization and Algorithms.	IST-UL - Optimization and Algorithms.	OB	6	2
IST-UL - Artificial Intelligence and Decision Systems.	IST-UL - Artificial Intelligence and Decision Systems.	OB	6	2
IST-UL - Autonomous Systems.	IST-UL - Autonomous Systems.	OB	4	2
IST-UL - Distributed Real Time Control Systems.	IST-UL - Distributed Real Time Control Systems.	OB	6	2
UTLN - Numerical Methods in Fluids.	UTLN - Numerical Methods in Fluids.	OP	2	1
NTNU - Safety and Asset Management, Specialization Course.	NTNU - Safety and Asset Management, Specialization Course.	OP	7,5	2
NTNU - Norwegian as a Foreign Language.	NTNU - Norwegian as a Foreign Language.	OP	2	2
IST-UL - Entrepreneurship, Innovation and Technology Transfer.	IST-UL - Entrepreneurship, Innovation and Technology Transfer.	OP	6	2
IST-UL - Telecommunication Networks.	IST-UL - Telecommunication Networks.	OP	6	2
IST-UL - Portuguese as a Foreign Language.	IST-UL - Portuguese as a Foreign Language.	OP	2	2
Master's Thesis.	Master's Thesis.	TFM	30	2

#### 4. Organización temporal del plan de estudios.

Asignatura	Curso	Semestre	Carácter	Créditos
UTLN - Scientific Writing Skills and Methods.	1	1	OB	1
UTLN - Deep Learning.	1	1	OB	3
UTLN - Machine Learning.	1	1	OB	3
UTLN - Modeling of Marine Systems.	1	1	OB	2,5
UTLN - Underwater Acoustics.	1	1	OB	2
UTLN - Reinforcement Learning.	1	1	OB	3
UTLN - Control Theory of Multivariable Linear Systems.	1	1	OB	5
UTLN - Geometric, Kinematic and Dynamical Modeling of Robotic Systems.	1	1	OB	2,5
UTLN - Design Thinking and Project Management.	1	1	OB	3
UTLN - Fundamentals of Marine and Coastal Processes.	1	1	OB	5
UTLN - Risk and Reliability Engineering and AI Potencial.	1	2	OB	1
UTLN - Legislation on International Water an Autonomous Vehicles.	1	2	OB	1

Asignatura	Curso	Semestre	Carácter	Créditos
UTLN - Fairness, Accountability and Transparency in AI.	1	2	OB	1
UTLN - Marine Mechatronics.	1	2	OB	2,5
UTLN - Advanced Control for Autonomous Vehicles.	1	2	OB	3
UTLN - Optimization Techniques.	1	2	OB	3
UTLN - Data-driven Machine Perception.	1	2	OB	3
UTLN - Adaptive Autonomous Robotic Behaviour.	1	2	OB	2,5
UTLN - Marine Localisation and Mapping.	1	2	OB	1,5
UTLN - Explanable AI.	1	2	OB	1
UTLN - Underwater Interventions.	1	2	OB	1,5
UTLN - Autonomy in Subsea Operation.	1	2	OB	1,5
UTLN - Cooperative Robotics.	1	2	OB	1,5
UTLN - Deep-sea Drones and Missions.	1	2	OB	2
UTLN - Underwater Acoustic Sensors.	1	2	OB	1
UTLN - Entrepreneurship - Industry and Research Project.	1	2	OB	2
UTLN - Intelligent Robotics for Seabed Resources Exploitation.	1	2	OB	1
UTLN - Artificial Intelligence and Shipping.	1	2	OB	1
IST-UL - Embedded Computational Systems.	1	2	OB	6
UJI - Perception and Manipulation.	2	1	OB	4
UJI - Spanish as a Foreign Language.	2	1	OB	2
UJI - Multi-robot Systems.	2	1	OB	4
UJI - Cognitive Processes.	2	1	OB	4
UJI - Wireless Communication.	2	1	OB	4
UJI - Telerobotics and HRI.	2	1	OB	4
UJI - Robotic Intelligence.	2	1	OB	4
UJI - Simulation, Middleware and Benchmarking.	2	1	OB	4
NTNU - Marine Control Systems, Specialization Course.	2	1	OB	7,5
NTNU - Marine Control Systems, Specialization Project.	2	1	OB	7,5
NTNU - Decision Making under Uncertainty for Autonomous Systems.	2	1	OB	7,5
NTNU - Research-based Innovation Methodologies in Computer and Information Science.	2	1	OB	7,5
IST-UL - Optimization and Algorithms.	2	1	OB	6
IST-UL - Artificial Intelligence and Decision Systems.	2	1	OB	6
IST-UL - Autonomous Systems.	2	1	OB	4
IST-UL - Distributed Real Time Control Systems.	2	1	OB	6
UTLN - Numerical Methods in Fluids.	1	1	OP	2
NTNU - Safety and Asset Management, Specialization Course.	2	1	OP	7,5
NTNU - Norwegian as a Foreign Language.	2	1	OP	2

Asignatura	Curso	Semestre	Carácter	Créditos
IST-UL - Entrepreneurship, Innovation and Technology Transfer.	2	1	OP	6
IST-UL - Telecommunication Networks.	2	1	OP	6
IST-UL - Portuguese as a Foreign Language.	2	1	OP	2
Master's Thesis.	2	2	TFM	30

Nota: En la web de la Universitat Jaume I ([www.uji.es](http://www.uji.es)) se puede consultar información más detallada sobre este plan de estudios.