

# DECLARATION OF PRIORITY INTEREST TO COMPETE FOR SCHOLARSHIPS LINKED TO A SPECIFIC RESEARCH TOPIC

I, \_\_\_\_\_ (full name),  
born in \_\_\_\_\_ (place) on \_\_\_\_\_ (date)

wish to express my interest in applying primarily for the following scholarships linked to a specific research topic (please tick the appropriate box and list the research topics in order of priority for greatest interest)

PhD Programme in “ <b>Agri-Food Science, Technology and Biotechnology</b> ”			
Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Microbes and microbial products impacting on health, environment, food, and sustainability.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Polymicrobial fermentation by synthetic consortia to unravel microbe-to-microbe interactions in natural whey starter metacommunities for hard-cooked cheese production (MICROSOCIAL)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
Integrated phenomics and genomics for cereal predictive breeding	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____ _____
Assessing canopy microclimate and wetness conditions to improve growth and phytopathological status of fruit trees towards sustainable crop productions	<input type="checkbox"/> YES	<input type="checkbox"/> NO	

**PhD Programme in “Health innovative products and technologies (HIP-TECH)”**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
Study of the effects of environmental exposure to p-cresol and the associated risk of neurological diseases for sustainable development	<input type="checkbox"/> YES	<input type="checkbox"/> NO	1 _____ _____
Innovation in the production and development of biotechnological drugs	<input type="checkbox"/> YES	<input type="checkbox"/> NO	2 _____ _____
Use of Real-World Data, Artificial Intelligence, and Innovative Technologies in the Design, Planning, and Implementation of Clinical Trials	<input type="checkbox"/> YES	<input type="checkbox"/> NO	3 _____ _____

**PhD Programme in “Humanities, technology and society”**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
New Artistic Media and the Transformation of Social Relationships. On the Use of New Artistic Media (Video, Digital, and Web) in the Promotion and Consolidation of New Forms of Social Relationships Among Individuals and Communities	<input type="checkbox"/> YES	<input type="checkbox"/> NO

**PhD Programme in “Information and communication technologies (ICT)”**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
Application of Artificial Intelligence Techniques and Multi-Agent Systems for the Optimization of Medical-Diagnostic and Therapeutic Processes	<input type="checkbox"/> YES	<input type="checkbox"/> NO	1 _____ _____
Resilient, distributed and continuous-learning artificial intelligence models based on brain functioning for energy-efficient applications	<input type="checkbox"/> YES	<input type="checkbox"/> NO	2 _____ _____
Electric drives for green transportation applications	<input type="checkbox"/> YES	<input type="checkbox"/> NO	3 _____ _____
Hot Carrier effects in advanced semiconductor devices for energy and power management.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	4 _____ _____
Generative Approaches for Ethical and Privacy-Preserving Medical Imaging Data Synthesis	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Characterization and analysis of electrical parameters drifts in power devices	<input type="checkbox"/> YES	<input type="checkbox"/> NO	5 _____ _____
Multimedia Technologies for Large-Scale AI	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Context Aware Shared Autonomy for Robotic Manipulation Tasks	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Extending Generative AI Systems with Modularity, Efficiency and Compositionality	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Generative AI models for Content Understanding and Generation	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Development of Multimodal Models for Visual Inspection	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

**PhD Programme in “Civil, environmental and materials engineering”**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Development of innovative hydrological and hydraulic models based on ultra-high-resolution topographic data to enhance the resilience of rural and urban areas to extreme events	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## PhD Programme in “Industrial Innovation Engineering”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Optimization and Artificial Intelligence Methods for Business Processes	<input type="checkbox"/> YES	<input type="checkbox"/> NO	1 _____
Management, analysis, and utilization of planetary and extra-planetary satellite data	<input type="checkbox"/> YES	<input type="checkbox"/> NO	2 _____
Sustainability and Innovation: Intelligent Manufacturing Processes through Digitalization	<input type="checkbox"/> YES	<input type="checkbox"/> NO	3 _____
Development and implementation of planning and control algorithms for autonomous surgical robots	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Development and implementation of an advanced perception system based on deep learning for intraoperative analysis	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Development and implementation of control and artificial intelligence algorithms for the coordination of heterogeneous robotic systems	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Development of methodologies for the fluid-dynamics design of printheads for industrial digital printing	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

## PhD Programme in “Mechanical and Vehicle Engineering”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Advanced Technologies for the Ecological and Digital Transition: Innovative Solutions for Energy Efficiency, Sustainable Mobility, and Circular Economy – Numerical and Experimental Study for the Optimization of the Combustion of Pyrolysis and Gasification Gases	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## PhD Programme in “Labour, development and innovation”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
The ageing of the working population: the governance and organisation of labour relations as a condition for promoting the well-being and skills development of workers of all ages	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Critical factors for sustainable circular value chains in Agrifood industry	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
The evaluation of territorial care reform initiatives within the PNRR Health Mission	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____ _____
Climate Risk and Green Investments	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____ _____

## PhD Programme in “Mathematics”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
The Geometry of Deep Learning	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Towards greener AI: optimising hyperparameters for sustainable and adaptive intelligence	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
Scientific machine learning for partial differential equations	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Stochastic particle methods for optimization problems	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____ _____
Logic and symbolic systems for rule extraction and information treatment from text in an agentic context: an integrated	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

## PhD Programme in “Models and Methods for Material and Environmental Sciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Development of solid-state electrolytes for optimizing the performance of Li-ion batteries	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Circular economy applied to nature-based solutions for biomass carbon capture and storage in sustainable agriculture, effects of an innovative compost on soil organisms and plants	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
Organometallic complexes bearing salmen and salben ligands and their application in catalysis	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____ _____
Multiparametric analytical approaches for the characterization of agri-food supply chains	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____ _____

## PhD Programme in “Neurosciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please enlist the topics in order of priority:</u>
Multiscale modelling of brain circuits for innovative digital twins and high energy efficient Artificial Intelligence models	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____ _____
Biomarker research in Amyotrophic Lateral Sclerosis	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____ _____
From Principle to Practice: A multistakeholder study on Fidelity in Mental Health Services Implementing Open Dialogue	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____ _____

## PhD Programme in “Physics and Nano Sciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		<u>If you are interested in more than one specific research topic, please list the topics in order of priority:</u>
Thermoelectric energy conversion at the nanoscale in density-of-states engineered materials	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>1</b> _____
Flexible and green thin-film electronics with zero impact on nature	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>2</b> _____
Design, fabrication and characterization of sustainable electronic devices	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Modeling solid state spin qubits for quantum technologies	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<b>3</b> _____
BlackHoleWeather: Advancing Black Hole Astrophysics via Simulations and Observations	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____
Combining high-performance computing, machine learning and atomistic simulations to design nanostructures for thermal energy harvesting	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____

## PhD Programme in “Legal Sciences”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Sustainable Development: Studies for a European and National Law of Sustainability	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## PhD Programme in “Human Sciences: studies on language and literature, history and philosophy, communication and digital humanities”

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Promoting Inclusive Slow Tourism: Cultural Heritage Exploration through Digital Media and AI	<input type="checkbox"/> YES	<input type="checkbox"/> NO

The option hereby chosen has priority over regular places, with or without scholarship.

Date and place, \_\_\_\_\_

Signature

\_\_\_\_\_