



**Politecnico  
di Torino**



## **Development of a multi-body hydrodynamic interaction framework: Floating islands case study**

Master thesis proposal at the Marine Offshore Renewable Energy Lab Department of  
Mechanical and Aerospace Engineering Politecnico di Torino

### **👤 Recommended profile:**

Mechanical Engineering, Aerospace Engineering, mathematics Engineering, Physics of complex systems

### **💡 Topics involved:**

Floating islands

### **✉ Contact references:**

MOREnergy Lab Supervisor - Sergej Antonello Sirigu (sergej.sirigu@polito.it)

## **Proposal description**

The scope of the thesis concerns the technological development of interconnected floating platforms for residential use. The goal of the thesis activity is the development of mathematical and numerical models for studying the hydrodynamic interaction of interconnected floating platforms. Subsequently, optimization and preliminary design of modular housing platforms and their connections will be carried out. This thesis activity is part of the "Seaform" project studying the feasibility of creating communities on floating artificial islands (<https://www.seaform.it/>)