



**Politecnico
di Torino**



Numerical modeling and Design of a Connection System for Modular Floating platforms

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, Civil Engineering

💡 Topics involved:

Floating islands

✉ Contact references:

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Proposal description

The objective of this thesis proposal is the numerical modeling using FEM and design of an innovative connection system for modular offshore floating platforms based on elastomeric bearing technology. Elastomeric bearings, widely used today in seismic buildings and bridges, provide excellent elastic characteristics and resistance to other expected loads in connections between floating platforms. The aim of the thesis is to develop FEM numerical models for the mechanical characterization of elastomeric bearings and the consequent design of the connection system between platforms, both functional and mechanical.

This thesis activity is part of the "Seaform" project studying the feasibility of creating communities on floating artificial islands (<https://www.seaform.it/>)