## Engineering Internships 2020

Oceans of Energy is a start up company, we develop floating systems for renewable energy at sea. Our goal is to allow all islands and all populations near the sea to generate clean energy using their ocean space rather than their scarce land.

We are passionate about creating new maritime technology. We believe that an innovation is most successful when lead by a small organization which is 100% focused on making it a success, while we cooperate actively with research institutes and offshore industry.

The engineers, both staff and interns, play a key role in the development of our novel floating renewable energy platforms. <u>Maritime engineering</u>, <u>structural engineering</u>, <u>electrical and</u> <u>software engineering</u>, we integrate all. Mechanical solutions, determining the mooring loads of floating structures, analysing the hydrodynamic behaviour, designing the electrical layout and building it offshore proof, building prototypes and installing them at sea is our process of bringing our design from concept to reality.

## Challenges include:

- Conceptual design, feasibility check and concept selection
- Hydrodynamic modelling of novel floating renewable energy platforms
- Calculation and verification of structural strength of floating systems and connections
- Selection of materials
- Plan and supervise model-testing of scale models
- Verify outcome of numerical modelling with hand-calculations
- Hands-on building of prototypes and test models
- Analyse measurement data from real-life protoypes and pilot systems, and integrate findings in following designs
- Assembling sensor hardware, reading out sensors using Arduino or Raspberry Pi
- Data mining and processing; synchronizing databases among local, remote and cloud storage
- Electrical system integration, including wiring, connection, water tightening, soldering etc.

## Qualifications and Qualities:

- Bachelor or Master student in (typically) Mechanical, Civil, Offshore- or Maritime, Electrical, Computer Science or Software Engineering
- Capable of or eager to learn design, numerical modelling, building, testing
- Startup mentality: enthusiastic, independent, and getting things done with simple means.
- Self-directed, quick learner
- Driven, curious and solutions-oriented; bringing solutions rather than listing problems
- Able to perform well in a fast-paced and highly challenging environment
- Good communicator and able to work in a small team
- Excellent English language skills
- In possession of EU work visa

## Apply

For more information and applying, please send CV and a short motivation to <u>hr@oceansofenergy.blue</u> with subject "Engineering internship".