

## RECRUITMENT OF A TEACHING AND RESEARCH PROJECT CONTRACT

2024-2027

<b>Faculty, Department:</b>	<b>ESIX Normandie – GSI Department, Cherbourg</b>
<b>Laboratory :</b>	<b>LUSAC</b>
<b>Section CNU :</b>	<b>60</b>
<b>percentage of work: (50% or 100%)</b>	<b>100%</b>
<b>Requested recruitment date:</b>	<b>2024, September the 1st</b>
<b>Contacts - Teaching information</b>	<b>Jérôme Bernard (head of department GSI):</b> <a href="mailto:jerome.bernard@unicaen.fr">jerome.bernard@unicaen.fr</a>  <b>Sylvain Guillou (Teacher in Mechanics and Renewable Energy)</b> <a href="mailto:Sylvain.guillou@unicaen.fr">Sylvain.guillou@unicaen.fr</a>
<b>- Research contact</b>	<b>Sylvain Guillou (directeur laboratoire LUSAC):</b> <a href="mailto:Sylvain.guillou@unicaen.fr">Sylvain.guillou@unicaen.fr</a>

### I. TEACHING ACTIVITIES: Mechanical engineering

#### ► Training courses concerned:

- **Levels :** Bachelor degree  Master degree  - **Degrees:** Energy Engineering diploma, Industrial Engineering Engineer, ESIX Normandie, Cherbourg University Site, in apprenticeship training.
- **Subjects:** Renewable Energies, Energy Storage, Mechanics, Fluid Mechanics, Resistance of Materials, Structural Dynamics. The courses to be carried out will mainly be lessons, practical work and project supervision.

The recruited candidate will have to complete courses, tutorials, practical work in the above-mentioned subjects. He/she will also have to be involved in the supervision of student projects, with a strong component in Project Management. He will have to actively participate in the implementation of the Energy Engineering diploma in apprenticeship training as well as in the H2 NC project.

### II. RESEARCH ACTIVITIES:

The research work will be carried out at LUSAC (University Laboratory of Applied Sciences of Cherbourg) in the Flows and Environment team. The team works on Marine Renewable Energies. The candidate will work in the field of Marine Renewable Energy from a mechanical point of view. Skills in one or more of the following areas are expected:

- Renewable energies and their storage
- modelling of the fluid-structure interaction;
- Fluid Dynamics Simulation
- hydrodynamic tunnel experimentation (PIV, LDV);
- Multiphase modelling

Website: <http://lusac.unicaen.fr/>