# Education in Energy, Technology, and Environment

### **Brief Description of the Project:**

As the importance of addressing climate change grows, so does the need for comprehensive education in energy and the environment, and impactful technologies crucial to mitigating the crisis. In this research internship, students will take a proactive role in developing educational components and courses in these critical areas. Our University, especially UiO:Energy and Environment aims to increase the number of educational components for the mentioned fields and therefore we seek to investigate student interests in education related to energy, the environment, and emerging technologies. The primary goals of this course are to identify compelling topics, develop concepts for classes (also with a focus on project-based hand-on learning), and create an engaging learning environment, which attracts more student for the fields of energy and environment.

This internship provides a unique opportunity for students to actively shape their education. By participating in this initiative, students can exert a significant influence on the development of educational components and courses, contributing to the enhancement of the overall learning experience.

## **Key facts:**

<u>Supervisor(s):</u> Sebastian Zieglmeier and Paal Engelstad (Department of Technology systems, ITS)

<u>Preferred Background of Candidate(s):</u> Interest in education, energy and environment is satisfying.

Number of Available Projects: 1-3 (The possibility for group work exists.)

<u>Preferred Project Period:</u> The project period is flexible and will be determined collaboratively between the supervisor and the selected student(s).

#### **Background and Outline of Project Work:**

The pressing need to combat climate change emphasizes the importance of education in energy, the environment, and transformative technologies. With current offerings limited at our university, the student(s) undertaking this project will actively contribute to expanding educational opportunities by exploring student interests and developing concepts for classes. Going beyond theoretical aspects, the emphasis will be on creating practical and project-based learning experiences.

Tasks may include (not all necessary):

- 1. Identify interesting and relevant topics in energy, the environment, and technologies.
- 2. Develop concepts for classes, also with a focus on practical and project-based learning.
- 3. Enhance the attractiveness of education in energy, the environment, and technologies.

#### **Expected Output:**

The research internship is expected to yield a report outlining regarding to the respective task the student interests, proposed topics, or concepts for classes.

Depending on the project's findings, there is potential for further cooperation, e.g. in form of a master's thesis.

This internship presents a unique opportunity for motivated students to actively shape the future of education in energy, the environment, and technologies. Selected candidates will play a crucial role in influencing the direction of new courses, gaining valuable experience in educational development, and contributing to the university's commitment to sustainability. The autonomy provided allows students to tailor their research direction based on their interests in collaboration with the supervisors.

#### Provided links:

Overview of existing courses regarding energy and environment: <u>Studies - UiO:Energy and Environment</u>