



PROJECT ANNOUNCEMENT
Fall 2025

Title: COMPUTATION OF THE THRUST OF A HOVERCRAFT PROPELLER

Position Ref: HOVTHRUST

Type: Individual

Status: New

Seats: 1 student (Already working with Alp Karakulak)

Project Description:

The project involves computation of the thrust of each propeller of the hovercraft, at various rotational speeds, which has been built in the department. The propeller is to be modelled with a CFD software.

Work Description:

- Studying the theory behind propeller thrust.
- Literature survey for relevant papers.
- Obtaining the geometry of the propellers on the hovercraft.
- Learning to model a moving object within a fluid stream with a CFD code.
- Drawing a CAD model.
- Running the model at various rotational speeds.
- Analysis of the results.

Required Qualifications and Skills:

- Appetite for theoretical and numerical work.
- Knowledge of a CFD code.
- The project will be on campus.

Related UN Sustainable Development Goals:

- No.9 Industry, innovation and infrastructure.

Difficulty: high (X) medium () low ()

Time commitment: high (X) medium () low ()

Estimated expense: 0 TL