



Introduction

In collaboration with the Dynamic Systems and Design Cluster at Faculty of Engineering, Ain Shams University, the following internships are available for the undergraduate students. The aim of these internships is to improve the Higher Education in mechanical engineering in the fields of condition monitoring of sustainable technologies to improve climate change resilience in the education.

Benefits for the students:

- Possibility to work in a high-quality research environment.
- Participate in a real-life project and interact with a team of qualified engineers.
- Certificate of Participation in the project upon successful completion.

Please note that this is a full-time internship.

Internship Timeline:

Deadline for application	12/07/2022
Internship Period	24/7 to 22/9

To apply, send your **CV** to hr.asugards@eng.asu.edu.eg indicating **the title of** the project you are applying for.

Modelling of crack damage in composite wind turbine blade

Project Description

It is important to understand the crack models in the composite materials during the design phase to enable better prediction of the material performance under the real different load scenarios.

Scope of Work

- Survey report on crack models in fiberglass composite materials.
- Micromechanics analysis of proposed of fiberglass composite plate.
- Modelling of fiberglass composite plate.
- Apply the suitable crack model.
- Post-Processing of the model.

Needed Qualifications

- Attended Finite element course.
- Prior experience in any of finite element software (ABAQUS, COMSOL) is preferable.
- Experience with CAD software such as Solidworks, Inventor, .etc.

Number of Participants: 2