Ship and Marine Structure Lab

船舶與海洋結構實驗室

The Ship and Marine Structure Lab focuses on developing analytic procedures to assess hydrodynamic and structural responses of marine structures such as ships, ocean renewable energy systems, offshore wind systems, mooring systems and power cables. Building atop developed procedures, the research interest covers areas including:

- 1. design of marine renewable energy systems,
- 2. structural integrity assessment,
- 3. numerical simulations of marine structures' global responses,
- 4. fatigue analysis of moorings and cables.

As of Fall 2021, we are actively looking for new members with interest in:

- Hydrodynamic and global response analysis of floating wind turbine systems
- Array design of offshore renewable energy systems
- Development of analysis procedure for floating wind turbines using OpenFAST
- Experiment design of marine cable used in offshore renewable energy devices
- General structural analysis of ships and marine structures