



## Project I Description

**Project Name: Design of a Water Taxi connecting Beirut, Jounieh, Byblos, and Tripoli**

**Sponsor: none**

### Project Overview

Water taxi is used around the world to provide transportation solutions within or between cities that are time and cost effective. They are used for touring a city or commuting to work.

This project explores the feasibility of providing such a service between the major cities on the northern lebanese coast namely: Beirut, Jounieh, Byblos, and Tripoli.

More specifically the project entails designing the water taxi terminal, selecting the vessel type and designing the fleet schedule both inbound and outbound for each of the 4 cities, and estimating the implementation cost.

### Project Areas

Facility planning, scheduling, simulation and optimization

### Project Deliverables

- A survey of the literature and applicable standards and codes on the design of Water taxi terminals and vessel type and schedule.
- A forecast of the demand (leisure, tourism, or work) for travel between cities (inbound and outbound)
- The design of the water taxi terminal facility in Beirut with the needed activities and resources to service the expected demand. Identify activities and activity relationships, and flow and space requirements.

- A facility plan and layout of the new terminal and the parking area.
- Vessel type and fleet size and the inbound and outbound schedule of taxis operating on the 4 suggested routes to meet the projected demand.
- A cost-benefit analysis of the proposed solution.

**Team Size and Majors needed**

INE: 3 students

