Eco-Friendly Shallow Draft

Florida International University Mechanical and Materials Engineering Department Boat



Problem Statement

To design an environmental friendly ferry capable to transport residents from a condo association to an island in Biscayne Bay area.

Objectives

- To carry between 12-20 people
- > Have solar power as primary means of power.
- > Meet all rules and regulations of local and governmental agencies.



Design Considerations

- > Shallow Draft.
- > Maximum depth below water hull 1 foot.
- > Environmental Regulations

Prototype and Testing

A scale version of the boat will be constructed in order to test both; the pontoon hull design and the electric power system.

Project Motivation

To gain experience by designing manufacturing a very and innovative and efficient water vessel using the knowledge obtained throughout mechanical engineering curriculum at FIU.

Time Line

	ask Name		Q4			Q1			Q2		
ı		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
	Site Visit Meeting with Client								Site Visit		
2	Literature Survey		Literatu	re Surve	y						
3	Design Alternatives		Design	n Alterna	tives						
ŧ [10% Report		10% F	Report							
5	Conceptual Design		Conce	ptual De	sign						
3	Poster Design		Pos	ter Desig	n						
7	Solidworks Modeling					Sol	dworks	Modelin	g		
3	Solidworks & ANSYS Selection						So	lidworks	& ANSY	's	
9	25% Report		259	& Report							
)	Research & Solar Panels Selection				Re	search	& Solar	Panels	Selection	1	
1	Analytical & Structural Analysis						Anal	ytical &	Structura	ı	
2	Purchasing Materials						Pu	rchasin	g Materia	ls	
3	Building Process & Testing						I		Building F	rocess	
1	Final Prototype						ı	Fir	nal Proto	type	
5	Final Report							Fi	nal Repo	rt	
3	Presentation								Presen	tation	

Team Members



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