

**UNIVERSITI TEKNOLOGI MARA**

**HULL DESIGN AND STABILITY OF  
FERRY TO PERHENTIAN ISLAND**

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## **ABSTRACT**

Perhentian Island, located off the northeastern coast of Malaysia, is a popular tourist destination known for its pristine beaches, crystal-clear waters, and abundant marine life. The current problem that occurs is the current which is Monohull type is unstable and the transportation service cant operate during Monsoon season. This study will recommend the best-suited Hull design to overcome the problem. The methodology that's been used in this study is Hull design and stability by software application and analysis through Excel. Based on the results, the ferry is stable after being analyzed by Initial stability, Trim calculation and GZ curve analysis. Overall the results show that this study is achieved the objective.

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I have gained a deeper comprehension of Allah's tremendous knowledge that permeates all facets of life thanks in large part to this dissertation. My eyes have been opened to His glory by the research process, which has also served as a reminder of my own smallness in the light of the intricacy and majesty of His creation. The more we learn, the more evident the miracles of Allah's creation become, which in turn inspires awe and reflection on His magnificence. Imperfection exists even in our simplicity, which strengthens our belief in Allah's infinite magnificence.

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