# UNIVERSITI TEKNOLOGI MARA

# PRODUCTION DESIGN OF JET SKI ATTACHMENT (WAVEBOAT)

## KHAIRUL AMIRIN BIN AHMAD

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#### **ABSTRACT**

This project presents a combination of boat and jet ski known as Waveboat which can be used in a various way but mainly for recreation. Waveboat are very uncommon in appearance because they are rarely utilized and only can be spotted in specific locations. In this research, the current design of the Waveboat is that the jet ski is attached at the back of the boat which leads to the maneuvering problem and the existing design is difficult to control as the load is in front of the driver. Then, it blocks the driver's view which may cause any unwanted accident during the recreational activity. The objective of this project is to develop a production design in detail drawing of the Jet Ski Attachment and to determine the optimum production design method. In the methodology, this project consists flow chart, survey, product design specification, physical decomposition, and gantt chart. This project mainly focused on the Jet Ski Attachment and it is achieved by developing the production detail drawing using Solidworks and Rhinoceros 3D. For this project, the Vacuum Infusion Method is chosen based on the calculation from the Bill of Materials (BOM). In conclusion, the detailed drawing can be developed by using Computer-Aided Design (CAD), and the production method that has the lowest cost will be used. For future study, the fabrication process should be done on the redesigned Jet Ski Attachment and do more research about production design methods that may have better process flow and lower cost.

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