

**UNIVERSITI TEKNOLOGI MARA  
CAWANGAN TERENGGANU  
KAMPUS BUKIT BESI**

**MODELLING AND SIMULATION OF BRAKE  
ROTOR FOR MECHANICAL ANALYSIS**

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## **ABSTRACT**

The major aim of completing the project is to identify and calculate the impacts of loads and internal force of an automobile component. This project creates a simulation to demonstrate the real impacts of various situations and actions such as sudden braking when the vehicle accelerates. The last answer ought to be able to achieve the objective of analysing the simulation of a certain automobile component, which is Brake Rotor in brake system of automobile. One of the steps occurred in the process is the product will be tested until it achieves its objectives and its expected result. Its objectives are to develop a finite element model and conduct a simulation of static analysis of a brake rotor using CAD software which is Solidworks. For this project to be successful and meet its objectives, several research procedures will be carried out, including those about the materials that should be utilised, the data collecting techniques that will be employed, and the kinds of data variables such as its material and dimension that should be used in this project.

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