



FINAL YEAR PROJECT REPORT

DESIGN & FABRICATION OF BATTERY ELECTRIC VEHICLE

**In fulfillment of the requirement
For degree of
BEE (Electronics)**

By

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This report is submitted as required for the Project in accordance with the rules laid down by the Bahria University as part of the requirements for the award of the degree of Bachelor of Engineering. I declare that the work presented in this report is my own except where due reference or acknowledgement is given to the work of others.

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Abstract

Undoubtedly cars have become the most essential means of travelling and hence play a vital role in common day lives. But with depleting fossil fuel resources, there is a wider acceptance of renewable energy as the main source of power than ever before. The automobile industry is no different. They, in the last few years, have seriously contemplated to look for other resources to power their cars.

In the last few years, Pakistani people have been subjected to shortage of fuel. Because of high pricing of petrol and frequent shortage of CNG, battery electric vehicles could prove to be efficient by all means. Due to non-conventional nature, it's going to be eco-friendly that would eliminate the air pollution and provide miles of driving on a single recharge. Due to economically efficient and better performance, people are bound to go for it.

In light of this, we have successfully converted a car with an inefficient internal combustion engine into a cleaner battery electric vehicle, which is powered by an electric motor. We have utilized a Suzuki FX and replaced its 800cc engine with a 19HP DC series motor. An electronic dc drive motor circuit will also be designed and fabricated in this project, which will help drive the motor. Five 12v, 120Ah batteries will be used to power the motor.

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