

FABRICATION OF ELECTRIC BIKE

**A PROJECT REPORT IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
AWARD OF THE
DEGREE OF
BACHELOR OF TECHNOLOGY
IN
MECHANICAL ENGINEERING**

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CERTIFICATE

This project is to certify that report is entitled “**FABRICATION OF ELECTRIC BIKE**” was carried out by **K.MANIKANTA (17815A0329), M.SHANMUKA SURYA SAI (17815A0335), V.HAREESH (16811A0388), K.SURESH (17815A0322)** in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in “**MECHANICAL ENGINEERING**” by JNTUK university at **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, NARSIPATNAM**, during the academic years 2016-2020.

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ABSTRACT

An electric bicycle, also known as an e-bike or booster bike, is a bicycle with an integrated electric motor which can be used for propulsion. There are a great variety of e-bikes available worldwide, from e-bikes that only have a small motor to assist the rider's pedal-power (i.e., pedelecs) to somewhat more powerful e-bikes which tend closer to moped-style functionality. However, retain the ability to be pedalled by the rider and are therefore not electric motorcycles. E-bikes use rechargeable batteries and the lighter varieties can travel up to 25 to 32 km/h (16 to 20 mph), depending on the laws of the country in which they are sold, while the more high-powered varieties can often do in excess of 45 km/h (28 mph). In some markets, such as Germany, they are gaining in popularity and taking some market share away from conventional bicycles, while in others, such as China, they are replacing fossil fuel powered mopeds and small motorcycles.

Depending on local laws, many e-bikes (e.g., pedelecs) are legally classified as bicycles rather than mopeds or motorcycles, so they are not subject to the more stringent laws regarding their certification and operation, unlike the more powerful two-wheelers which are often classed as electric motorcycles. E-bikes can also be defined separately and treated as a specific vehicle type in many areas of legal jurisdiction. E-bikes are the electric motor-powered versions of motorize.