



ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

Permanently Affiliated to JNTUK, Kakinada, Approved by AICTE, New Delhi

Recognized by UGC Under Section (2f) and 12(B) of UGC Act 1956

Aditya Nagar, ADB Road, Surampalem, 533437

Department of Mechanical Engineering

Project Title:	Design and development of Electrical two-wheeler	
Guide Name:	Mr. B Chennakesavulu	
Students Name with Roll No.:	16P31A03G4	REDDY SRI RAM
	16P31A03F5	NIMMANA VEERA VENKATA SIVA KUMAR
	16P31A03G5	SAGI PRUDHVI RAJU
	16P31A03G6	SALADI ROHITH SATYA ARAVIND
	16P31A03D7	GUDALA DILEEP KUMAR
	16P31A03F6	PABBINEEDI NAVYA KANTH

Abstract	PO's Mapping	PSO's Mapping
Conventional vehicle systems role is increasing day by day in the present world. It is also important to control the conventional vehicle in the point of production of the fuels using to run them, emissions. In this project we have designed an unconventional bike using the battery. In place of the engine, to reduce the emission and noise from the vehicle, we implemented the motor with battery power.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2, PSO3

PO1: Engineering Knowledge	PO5: Modern Tool usage	PO9: Individual & Team Work
PO2: Problem Analysis	PO6: Engineer & Society	PO10: Communication Skills
PO3: Design & Development of solutions	PO7: Environment & Sustainability	PO11: Project Management & Finance
PO4: Investigations on complex problems	PO8: Ethics	PO12: Life Long Learning
PSO1: Mechanical Engineers must be able to analyze, design and evaluate mechanical components and systems using cutting-edge software tools as required by the industries from time to time.	PSO2: The ability to work in manufacturing and other sectors' operations and maintenance plants	PSO3: As part of a team or individually, plan and manage activities in micro, small, medium and large enterprises

Relevance to PO's and PSO's

PO1	Applied the subject knowledge in calculation for design parameters
PO2	Studied and analysed existing designs of e bike
PO3	Structure of the frame is designed under simulation.
PO4	In the Calculation part of frame, different materials are taken into the consideration.
PO5	AutoCAD and Ansys workbench tools are used for design and simulation.
PO6	Design and fabrication of e-bike
PO7	Non-conventional energy source is applied
PO8	Ethics in design and development of product is followed
PO9	Simulation of the vehicle is done by the team collaboration
PO10	In designing the vehicle and participated in ETWDC communication skills improved
PO11	Business plan contains the work flow and cost control
PO12	Unconventional energy system development is necessary
PSO1	Design and development of complete vehicle is tested in Ansys workbench for impact analysis
PSO2	Maintenance of the vehicle achieved at basic level
PSO3	Entrepreneur skills attained

