



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 Fabrication of 360 Degree Rotating Vehicle"	
Guide Name:	Ms.A.Swathi	
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Abstract	PO's Mapping	PSO's Mapping
The design and fabrication of 360 degree wheel rotation vehicle using DC motor and steering is done to reduce time to turn from one direction to other direction. This vehicle can move in all direction at a same position by used of steering, sprocket, DC motor, bearing and chain drive. Main function of this vehicle is easy to move from one direction to other direction. Modern development and economical progression of Indian society resulted in increase of people on railway platform, increase of vehicle on the road, due to space constraints, in hospital is major problem of the country. Present study aims for development of a system to reduce the turning radius of vehicle. In this system at first vehicle is stopped and wheels are then turned in the required direction with help of steering system and DC motor. It has turning radius nearly equal to negligible of length of the vehicle itself. This vehicle used to carry the goods in various area such as, railway platform, hospital, industries and market.	PO1, PO2, PO4, PO9, PO10, PO11	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 designing of 360 degree rotating vehicle
PO2	Analysis of DC motors
PO4	Calculation of turning radius of the vehicle
PO6	This vehicle used to carry the goods in various area such as, railway platform, hospital, industries and market.
PO9	Fabrication of 360degree vehicle is done with team work
PO10	Students able to present their work through presentation and documentation which enhance their communication skills
PO11	Managing of costs and achieving better results
PSO2	Students are aware about manufacturing processes that are involved
PSO3	Students able to get plan and manage of activities involved in fabrication of 360degree rotating vehicle

