

DESIGN AND FABRICATION OF THREE WHEEL SEGWAY

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 “**DESIGN AND FABRICATION OF THREE WHEEL SEGWAY**” was carried out by **K.THANUJ (17815A0323), K.KRANTHI KUMAR (17815A0318), R.GOPAL (17815A0353) , K. ANVESH (17815A0319)** in partial fulfillment of the requirements for the award of the **Degree of Bachelor of Technology in “MECHANICAL ENGINEERING”** To JNTUK university at **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, NARSIPATNAM , during the academic years 2016-2020**

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ABSTRACT

Segway is designed to be a personal vehicle to carry a human operator that stands on and drives it. In industries humans should walk long distance to travel from one work site to another work site which will consume lot of human energy. By using this Segway we can reduce human energy. We can use this Segway in industries to travel from one place to another place. In recent years, because of the global pollution and energy shortage, automobiles and motorcycles are no longer the best for transportation. The device which we proposed will consume energy from battery which will reduce pollution and it is very small compared to other vehicle. This design and the development of segway is self-balancing personal transporter which has ability to carry single person to move from one place to another within the large campus.

This project deals with design, analysis and fabrication of an electrically powered stand up scooter called three-wheel Segway which has higher degree of freedom than normal vehicles and can be used as a personal transporter in urban environment.

Most commonly used Segway is the two-wheel self-balancing Segway, which is known for its zero turn radius. The three-wheel version can move just like the 2-wheeld one. The only difference is that, it replaces complex electronics like accelerometer and gyro with a simple swivel wheel (the third wheel) making it more **stable, economical and fail-safe**.