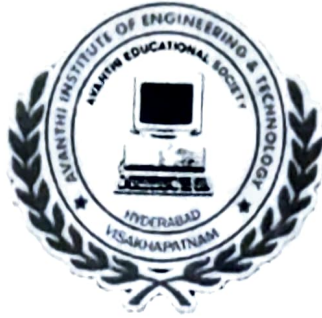


**DEPARTMENT OF MECHANICAL ENGINEERING  
AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**



**CERTIFICATE**

This is to certify that the project entitled "**AUTOMATIC WHEEL CHAIR CUM BED**" is the record of the work carried out by A.KIRAN (16811A0302), N.THARUN KUMAR(16811A0355), D.DILEEP KUMAR (16811A0317), A.L.V PRASAD(16811A0304) students of final year B. Tech in the department of Mechanical engineering. This work is done for the partial fulfilment for the award of BACHELOR OF TECHNOLOGY during the year 2019-2020.

**(Project Guide)**  
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**External Examiner**

**(Head of the Department)**  
**V.HARI KIRAN**

Review Report Of

**Automatic Wheelchair cum Bed**

**A thesis submitted in the partial fulfillment of the requirement for the award for the degree of**

**BACHELOR OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

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**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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## ABSTRACT

Wheel chair and Stretchers are very commonly used in the hospitals, airports, railway stations, shopping malls, etc. We have designed and fabricated a new modified wheel chair cum stretcher with Bluetooth controller. The developed wheel chair can very easily be converted into stretcher as well as operation table depending upon need. In this, we used the linear actuator mechanism has been synthesized for lifting. The mechanism is driven automatically.

The wheel chair gets converted into stretcher while lifting automatically. Linear actuator control is used to lift and to stretch. The system can be made with Bluetooth control and motorized. Wheel chair, Stretchers, Beds, Operation tables, etc. are major furniture items used in hospitals. Engineers are continuously applying their ideas to make product more and more sophisticated to facilitate doctor, patients, staff.

We devolved an innovative wheel chair which can be easily converted into Stretchers and small operation table. The percentage of patients in India is increasing day by day. In hospitals patients need to be shifted from wheelchair to stretcher, stretcher to beds, bed to wheelchair, or vice versa; which creates unsafe conditions for patients. Transferring patients in hospitals is a common problem for the caretakers. Purpose of design which will reduce the effort of the caretaker. Provide a safer transfer for the patients in hospitals.