



# **SNS COLLEGE OF TECHNOLOGY**

**(An Autonomous Institution)**

**COIMBATORE-35.**



Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A+’ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

## **DEPARTMENT OF AUTOMOBILE ENGINEERING**

### **COURSE NAME : 16AU0302 - RECENT TRENDS IN AUTOMOBILES**

**III YEAR / VI SEMESTER**

**Unit 4 – Comfort Systems**

**Topic : Active Suspension System**



# Need for Suspension System





# INTRODUCTION TO SUSPENSION SYSTEM

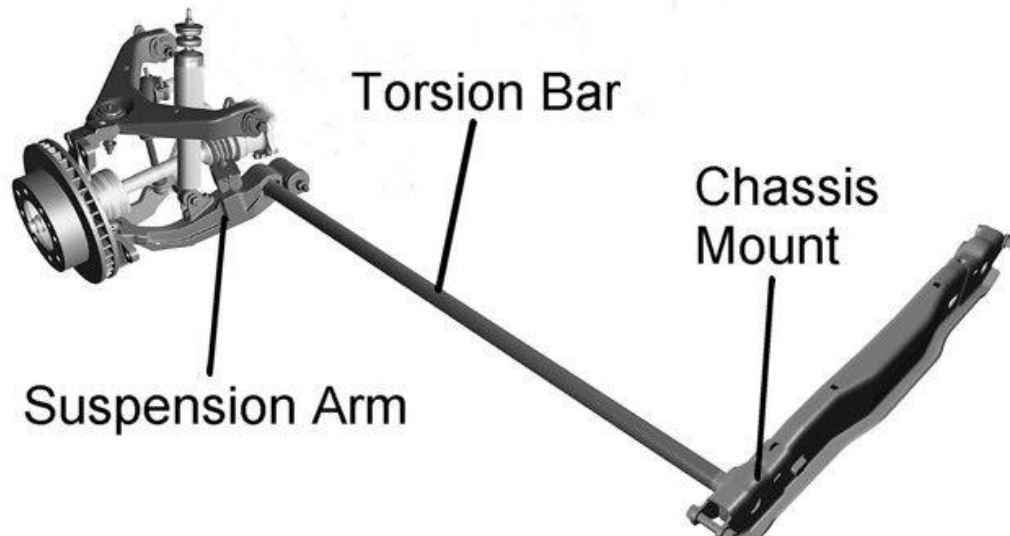


- Suspension system is a part of an automobile that negates most of the forces that the car gets from driving on the road making sure the cabin stays still.
- The work of a suspension is to provide comfort to the cabin
- Making sure the car stays in contact with the ground and that the driver has control over the tires at all points



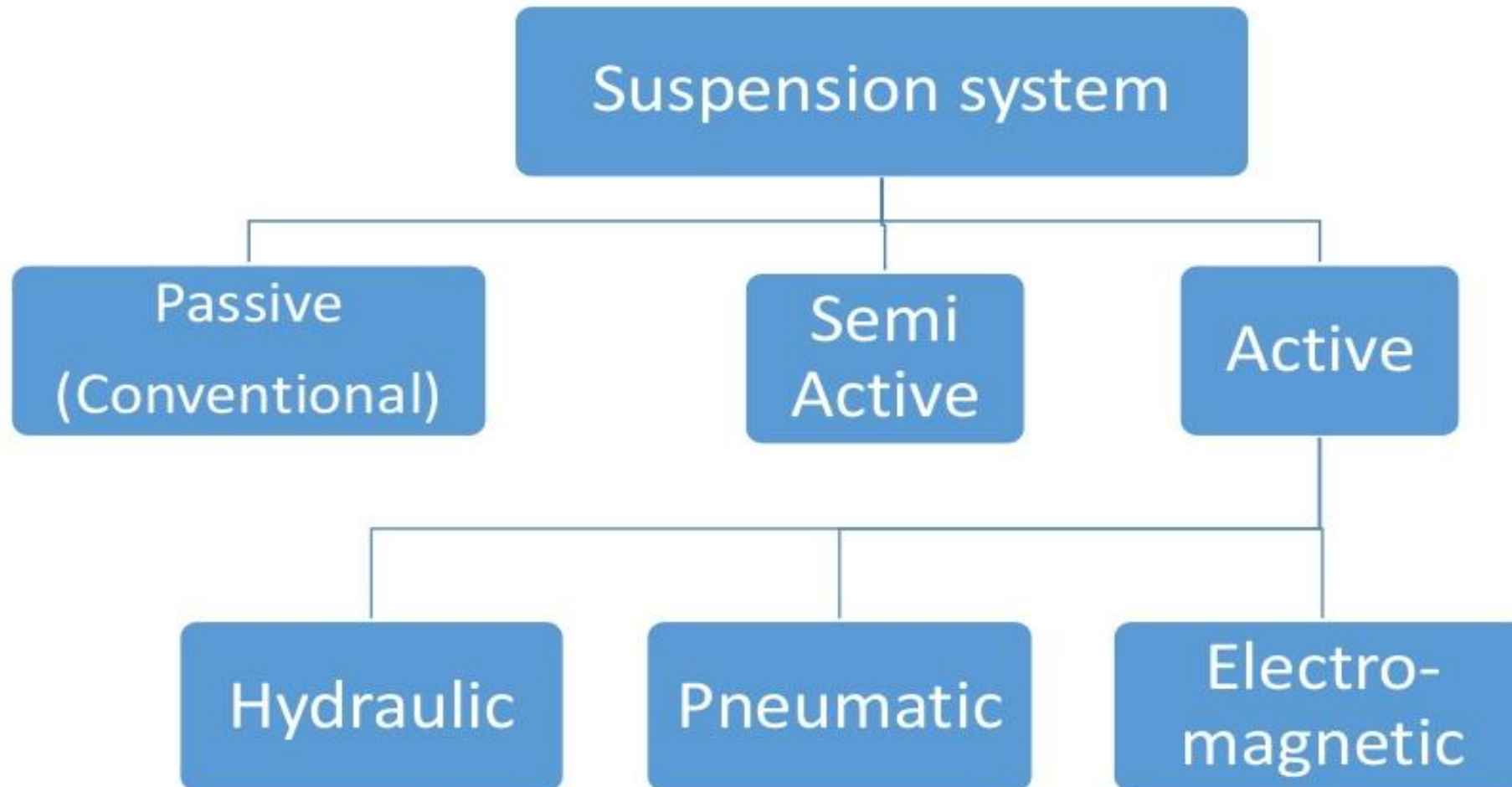


# TYPES OF SUSPENSION SYSTEM





# SUSPENSION SYSTEM TYPES





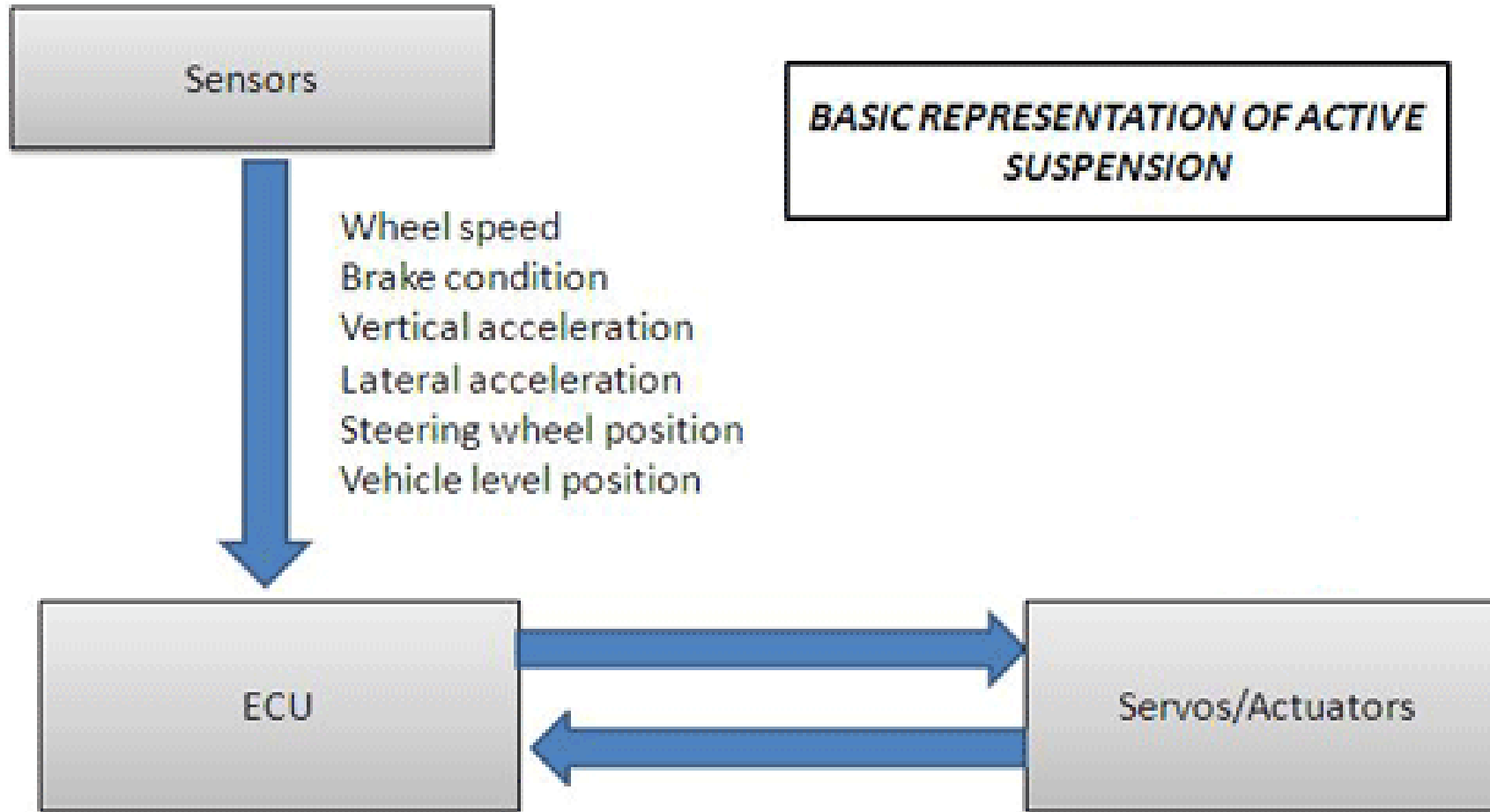
# ACTIVE SUSPENSION SYSTEM



- An active suspension is a type of automotive suspension on a vehicle.
- It uses an onboard system to control the vertical movement of the vehicle's wheels relative to the chassis or vehicle body.
- These technologies allow car manufacturers to achieve a greater degree of ride quality and car handling.



# BLOCK DIAGRAM





# TYPES OF ACTIVE SUSPENSION



- Hydraulic Actuation
- Electronic Actuation
- Electromagnetic type







# ADVANTAGES



- These technologies allow car manufacturers to achieve a greater degree of ride quality and car handling.
- The system virtually eliminates body roll and pitch variation in many driving situations including cornering, accelerating, and braking.

**ADVANTAGES**



## REFERENCE



- [https://en.wikipedia.org/wiki/Active\\_suspension](https://en.wikipedia.org/wiki/Active_suspension)



THANK YOU !!!