# SNS COLLEGE OF TECHNOLOGY

**Coimbatore-35**

**An Autonomous Institution**

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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## *DEPARTMENT OF MECHATRONICS ENGINEERING*

# 19MCE402 – AUTOTRONICS

Topic: Keyless Entry, Tyre Pressure Warning & Noise Control

# Keyless Entry

**Keyless Entry:**

**1.Overview:**

- Keyless entry is a feature that allows the driver to unlock and lock the vehicle without using a traditional physical key.

**2.Components:**

- Typically involves a key fob with a proximity sensor. When the driver is in close proximity to the vehicle, the system detects the fob and allows the doors to be unlocked with a touch or a button press.

**3.Convenience:**

- Enhances convenience by eliminating the need to physically insert a key into the door lock, especially beneficial in situations where hands are full.

# Keyless Entry

**4. Push Button Start:**

- Many keyless entry systems are paired with push-button ignition, allowing the driver to start the vehicle without inserting a key.

# Tyre Pressure Warning System

**Tyre Pressure Warning System:**

**1.Overview:**

- Monitors the air pressure in each tire and alerts the driver if the pressure falls below a specified threshold.

**2.Sensors:**

- Utilizes tire pressure sensors located in each tire's valve stem or within the tire itself.

**3.Warning Indicators:**

- When low pressure is detected, a warning light on the dashboard illuminates, signaling the need for tire inflation.

# Tyre Pressure Warning System

**4. Safety and Efficiency:**

- Improves safety by preventing under-inflated tires, which can lead to reduced vehicle control and increased fuel consumption.

**5. Real-time Monitoring:**

- Some advanced systems provide real-time pressure information for each tire, allowing drivers to monitor tire health more proactively.

# Noise Control

**Noise Control:**

**1. Overview:**

- Noise control systems aim to minimize unwanted noise within the vehicle's cabin.

**2. Active Noise Cancellation:**

- Utilizes microphones to pick up ambient noise within the cabin and generates sound waves through the vehicle's audio system to cancel out undesirable frequencies.

**3. Sound Insulation:**

- Includes the use of sound-absorbing materials, acoustic glass, and well-sealed gaps to reduce external noise from entering the cabin.

# Noise Control

**4. Vibration Dampening:**

- Addresses vibrations that can contribute to noise by using dampening materials in strategic areas.

**5. Enhanced Driving Experience:**

- Creates a quieter and more comfortable driving environment, especially at high speeds or in noisy traffic conditions.

# Thank You