

SESSION PLAN (ENGINEERING)

Session Title: Relay – Working Principle, Module Design and Arduino Control

Target Audience: First Year Engineering Students

Session Duration: 3 Hours per Class

Mode: Theory + Hands-on Practical

Session Objectives

- Understand relay working principle
- Identify relay terminals (COM, NO, NC)
- Design and assemble a relay module
- Interface relay with Arduino / ESP
- Control electrical loads safely

Detailed Session Plan (3 Hours)

Hour 1 – Theory

Relay introduction, internal working, types, terminals, safety precautions.

Hour 2 – Relay Module Construction

Component explanation, circuit design, breadboard wiring, relay testing.

Hour 3 – Controller Interfacing

Arduino/ESP interfacing, coding, relay ON/OFF control, load demo.

Session Schedule (Weekdays Only)

Date	Day	Class	Duration
12 Feb	Wednesday	Class 1	3 Hours
13 Feb	Thursday	Class 2	3 Hours
14 Feb	Friday	Class 3	3 Hours
17 Feb	Monday	Class 4	3 Hours
18 Feb	Tuesday	Class 5	3 Hours
19 Feb	Wednesday	Class 6	3 Hours