

**Sensors and its Circuit Design with Real-time Applications
with real-time examples and Practicals
Interdisciplinary Program
Powered by Virtual Innovation Lab
(In conformance with UN SDG)**

Eligibility: EEE, CSE, ME, CE BTech (I-IV) Years. Instructor Led Training.

Objective: The world is embarking on the 4th Industrial revolution. We need solutions and platforms for teachers and students to improve teaching, learning and research competence and develop 21st century skills like problem solving, innovation, collaboration, leadership and practical skills.

Outcome: Help students with practical understanding and usage of sensors using practical examples, which will be the foundation for IOT, Wearables etc.

S.No.	Course Outline
1	Introduction to Practical applications and Use of Soil Moisture Sensor and Rain Sensor
2	Practical applications Temperature Sensor and Flame Sensor
3	Practical applications IR based Sensors like IR Obstacle Sensor, Smoke Sensor Etc
4	Practical applications Light Sensor and Pressure Sensor
5	Practical applications Magnetic Sensor and Tilt Sensor
6	Practical applications Piezo Sensor and Vibration Sensor
7	Practical applications Touch Sensor and Sound Sensor
8	Practical applications different Gas Sensors
9	Practical applications Humidity Sensor
10	Practical applications Ultrasonic Sensor
11	Practical applications PIR Sensor and Doppler Sensor
12	Practical applications Hall effect Sensor
13	Practical applications Flex Sensor
14	Practical applications Color Sensor
15	Practical applications Accelerometer and Gyrometer
16	Practical applications Water flow sensor and Heart Beat Sensor