Course Content of Wireless Robotics Workshop

Session 1: Introduction to Robotics

- *Introduction*
- *Laws of Robotics*
- *Characteristics*
- *Introduction of Embedded System*
- *Information about Robots*

Session 1: Basic of Electronics

- *Ohm's Law*
- *Series & Parallel Circuit*
- *Practical use of Multimeter*

Session 2: Basic of Electronics II

- *Resistors*
- *Capacitors*
- *Diodes*
- *Transistors*

Session 2: Digital Electronics

- *Binary Data*
- *Binary Conversions*

Session 3: Logic Gates

- *NOT Gate*
- *AND Gate OR Gate*
- *Practical using Transistor*

Session 3: Wireless Communication

- *IR Communication RF*
- *Communication Bluetooth*
- *Communication Wi-Fi*
- *Satellite Communication*

Session 3: Motors

- ❖ AC Motors
- ❖ DC Motors
- ❖ DC Geared Motors
- ❖ L293D IC

Session 4: Data Transmission

- ❖ Encoder
- ❖ Decoder
- ❖ Address Bit Selector
- ❖ RF Communication

Session 4: Assembling of Wireless Kit

Projects Covered:

- ❖ Led Glowing
- ❖ Serial Circuit Practical
- ❖ Parallel Circuit Practical

Making Gates:–
- ❖ NOT Gate
- ❖ AND Gate
- ❖ OR Gate

Working of L293D using Tactile Switch Controlling of DC Motor Speed Wireless Robot

Kit Component

- ❖ Resistors Transistors
- ❖ Tactile Switch
- ❖ Male Burg Sticks
- ❖ Bread Board
- ❖ LED
- ❖ Wireless Kit
- ❖ DC Motors & Connecting Wires