Haptic Arm Robotics Course Content

This workshop is specially designed for students to give them exposure to hands on designing of Robotic Arm which finds enormous application in Industrial Automation. They will be developing their own modules of programs by their own hands and will be having proper hands-on on the robot. The motto of module is to give a real industry overview and an effort to reduce the difference between academics and industry expectations.

Session 1:

- Introduction to Industrial Robotics
- Robotics Arm application & Scope in Industry
- Introduction & Safety Precautions for Robotic Arm Kit

Session 2:

- Assembling Kit
- Working Mechanism of the Robotic Arm system
- Servo Motors basics & Programming
- DOF of robotic Arm

Session 3:

- Designing 5 DOF Robotic Arm
- Interfacing sensors & servos with Arduino

Session 4:

- Controlling a robotic arm for various tasks like pick & place objects
- Designing an Industrial Robotic Arm for an objective
- Developing the mathematical framework for your design
- Transforming the mathematical framework into program
- Handling advanced problems in programming languag