NITEC IN MECHATRONICS & ROBOTICS

Electives (Course Specific)

Application Mathematics

On completion of the module, students should be able to apply the knowledge of mathematics to solve engineering related problems involving the use of basic arithmetic, algebra, graphs and trigonometry.

Animatronics

On completion of the module, students should be able to define type of animatronic components and controller as well as assemble and testing of animatronic character.

Microcontroller Applications

On completion of the module, students should be able to program and interface microcontroller with external devices.

Production Control System and Applications

On completion of the module, students should be able to plan a simple production process, set up, install and troubleshoot an industrial production control system.

Electives (Inter-disciplinary)

Hydraulics

On completion of the module, students should be able to maintain hydraulic systems in industrial automation.

Single Board Micro-controller Applications

On completion of the module, students should be able to write structured programs to interface with peripheral devices and solve simple problems using single board micro-controller.

Lean Manufacturing

On completion of the module, students should be able to work effectively as a team member to support lean manufacturing and process improvement in the industries and apply PDCA in continuous process improvement to increase productivity.

Electives (Joint ITE-Industry)

Robot Palletizing Operations and Programming

On completion of the module, students should be able to operate the palletizing robot system, including editing and modifying programs for different palletizing operations.