



**SRI KRISHNA COLLEGE OF TECHNOLOGY
(AN AUTONOMOUS INSTITUTION)
KOVAIPUDUR, COIMBATORE - 641042.**



DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING

13IC711

**INDUSTRIAL AUTOMATION
LABORATORY**

1. Simulation of first order system and second order system with and without dead time using Discretization method and Runge – Kutta method.
2. Design of HART wire based communication system.
3. PLC programming in timers and counters.
4. Control of bottle filling system using PLC.
5. Simulation of feedback, feed forward, ratio and cascade complex control system using MATLAB package.
6. Design of Velocity control in Distributed control system using simulation package.
7. Design of dead beat / Dahlin / Kalman's Algorithms.
8. Design of Multivariable control system using MATLAB.
9. Design of pole placement controller for distributed control system.
10. Design of Instrumentation amplifier.
11. Design of cold – junction compensation circuit for thermocouples using RTD.
12. Design of signal conditioning circuit for strain gauge and RTD.

LIST OF EQUIPMENTS AVAILABLE.

S.No	Equipment Name
1	Programmable Logic Controller
2	PLC based Bottle Filling system
3	Laser Printer
4	Personal computer
5	Dot Matrix