

## Temperature Scanner using Universal DAQ Module

### Abstract

This Project is based on using universal data Acquisition hardware and software board, temperature scanner. Based on Linux or Microcontroller or FPGA universal data acquisition system, specialized functions module can be added like basic electronics modules like ADC, DAC, Pulse generator etc. It works on the expandable system for Data Acquisition and control; these modules are special function such as Temperature, Pressure, Power, Speed of vibration etc. by converting it into digital numeric values that can be manipulated by computer.

For this Project special function module is to measure more than one temperature point, in other way we are making a multichannel Temperature Scanner using IC Max 31865, which is a dedicated functional IC for PT100 Temperature Sensor.

Following works will be involved in this project.

1. Study the existing control system DAQ hardware
2. Learning of different tools/ software for the development of Temperature Scanner
3. Learning Temperature sensors PT100 and calibration processes.
4. Design and development of data handling method
5. Documentation for the above work

Required Period of work: About 5 months

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Division: Large Cryogenic Plant and Cryosystem (LCPC)

Stream/ Branch: Electronics

Eligibility: Only students of B.E./B. Tech. in Electronics branch can submit their application at following email addresses

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