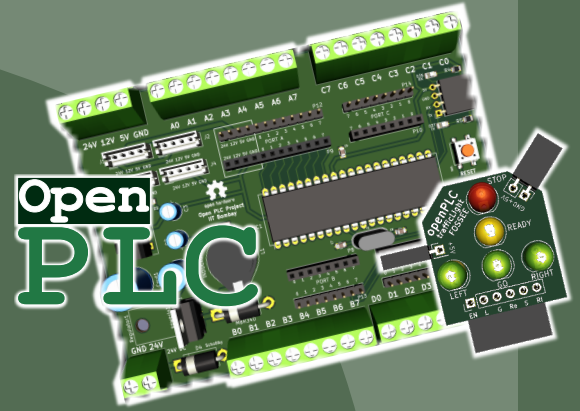


Online workshop on PLC for Polytechnic Colleges and MSME

3 September 2022

One day, interactive hands-on session 10a.m. - 5p.m.



The FOSSEE Project, IIT Bombay is offering an online workshop on OpenPLC. This workshop will help the participants to enhance their skill set, so that they can join the industry and get themselves trained for the challenging environment. OpenPLC is a cost-effective, robust, dynamic and modular hardware with an Open Source Software. The knowledge of OpenPLC will enable participants from all streams of Polytechnic and Engineering colleges to learn industrial automation that uses Ladder Logic Programming Language.

What is OpenPLC and LDMicro?

OpenPLC is an open-source hardware developed at IIT Bombay by the FOSSEE team. It is designed to get hands-on PLC programming experience at an affordable cost. OpenPLC can be programmed using the open source software, LDmicro. It is available for Windows and Linux OS.

Course content

- Introduction to LDmicro.
- Simulation and Compilation.
- OpenPLC Mainboard.
- Programming OpenPLC.
- OpenPLC Traffic Light and Switchboard Modules.
- Normal Coil and Normal Contact.
- Negated Coil and Negated Contact.
- Implementing NOT and AND logic gates.
- Internal Relay and Output pin.
- SET and RESET Coils.
- OneShot Instructions.
- Arithmetic Instructions.
- Move Instruction.
- Compare Instructions.
- TON and TOFF Instructions.
- RTO Timer Instruction.
- CTU Counter.
- CTD Counter.
- CTC Counter.
- OpenPLC Heater module.
- A to D Converter Read Instruction.
- PWM Instruction.

Methodology of Workshop:

Workshop will be conducted using pre-recorded spoken tutorial videos with side-by-side learning. All participants will get the LDmicro software, teaching content of Spoken Tutorials on OpenPLC with LDmicro. Participants can practice OpenPLC experiments without OpenPLC hardware using the simulation mode in LDmicro.

Advantages of using OpenPLC with LDMicro:

- OpenPLC has all the capabilities of an industrial PLC and is simple to work with.
- It is a modular hardware which allows students to add more modules for practice.
- It uses Ladder Logic programming which is one of the easiest and most efficient programming languages.
- Simulation mode of LDmicro helps students to explore various possibilities before programming on actual hardware.
- Low cost OpenPLC hardware can be made available for your institute if needed through a vendor.

Who can attend?

Students and Faculty of Polytechnic Colleges, Micro, Small and Medium Enterprises (MSME), and other technical students who are interested in PLC programming.

For more details visit:

<http://www.it.iitb.ac.in/nmeict/announcements.html>



Any queries related to OpenPLC:
Post queries on
FOSSEE forums
Send email to
eoutreach@cse.iitb.ac.in

