



INSTITUTE OF HUMAN RESOURCES DEVELOPMENT

(Established by Govt. of Kerala) Thiruvananthapuram, Kerala.

**Short-term Course on
Printed Circuit Board Design &
Fabrication**

(Course code : 202315)

1. Aim: To provide awareness and give sufficient hands-on training in Printed Circuit Board Design & Fabrication technique.
2. Duration of the course : 30 hours
3. Eligibility for admission : Diploma / ITI / BSc in Electronics, Electrical, Instrumentation
4. Intake : 30 students.
5. Course Fee : 2500 + GST Applicable
6. Eligibility for Certificate :
 - i) Student shall have minimum 75% attendance during the course.
 - ii) Student shall pass the evaluation test conducted by the training centre.

Thiruvananthapuram

Sd/-
DIRECTOR

[Course code : 202315]



INSTITUTE OF HUMAN RESOURCES DEVELOPMENT

Short-term Course on Printed Circuit Board Design & Fabrication

(Duration : 30 hrs.)

Module 1:

Introduction to electronics, Component introduction and their categories: Passive components, Active components, Component package types 5 Hrs

Module 2:

Introduction to PCB designing concepts -PCB and PWB, types, materials used, Familiarization of steps involved in PCB design. 6 Hrs

Module 3:

Introduction to Development Tools - KCAD, Proteus 5 Hrs

Module 4:

Practical session on Soldering and desoldering 4 Hrs

Module 5:

Practical session on PCB designing, Auto routing, Post Designing & PCB Fabrication Process 8 Hrs

Module 6:

PCB and Hardware Testing 2Hrs

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Thiruvananthapuram

Sd/
DIRECTOR



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**Short-term Course on
LED Light Products Design,
Assembly and Repairing**

(Course code : 202316)

1. Aim: To provide awareness and give sufficient hands-on training in LED light design, assembly and repair.
2. Duration of the course : 30 hours
3. Eligibility for admission : Minimum 12th Std
4. Intake : 30 students.
5. Course Fee : 2500 + GST Applicable
6. Eligibility for Certificate :
 - i) Student shall have minimum 75% attendance during the course.
 - ii) Student shall pass the evaluation test conducted by the training centre.

Thiruvananthapuram

Sd/-
DIRECTOR

[Course code : 202316]



INSTITUTE OF HUMAN RESOURCES
DEVELOPMENT

Short-term Course on LED Light Products Design, Assembly and Repairing

[Scheme] (Duration : 30 hrs.)

Module 1:

Introduction to electronics, Passive components, 7Hrs
Active components, Structure and operation of
LED

Module 2:

Familiarization of basic electronic instruments, tools 3Hrs
and soldering

Module 3:

Practical session on LED Luminary Assembly 6Hrs

Module 4:

Practical session on LED Board Design 6Hrs

Module 5:

Identification of the LED luminaire failure and 6Hrs
repair fault in an LED light both at the component
level and the strip level

Module 6:

Safety Standards and Procedures 2Hrs

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