

National Institute of Electronics and Information Technology, Patna

Name of Group: Electronics Division.

<u>Name of Course</u>: Certificate course in Printed Circuit Board Design using OrCAD Software.

Objective:

- To train the students with the knowledge of Basic Electronics Concept and Circuit Designing.
- To make familiar with PCB design and various processes involved.
- To provide in-depth core knowledge in design, performance analysis and fabrication of Printed Circuit Boards.

Duration: 1 Month

Batch Size: 30

Eligibility: Diploma/B.Sc./B.Tech in Electronics, Electrical, Instrumentation Engineering or its equivalent. (Completed or Pursuing)

Modules:	Instruments and Measuring techniques to be covered.
Module 1	• Basic Electronics Concept, Introduction to Circuit Designing, Need of Circuit Designing, Basic Circuit Designing Process., Introduction to PCB Designing Process.
Module 2	• PCB Design Process an Overview Getting started with PCB software, The Schematic work environment, Starting a project, Setting up your project
Module 3	• PCB Design Process Placing, editing, and connecting parts and, electrical symbols, Adding and editing graphics and text, Changing your view of a schematic page
Module 4	• Application Oriented Design and Fabrication Adding Copper Areas, Ratlines and Routings, Adding Text, Checking Design Rules, Making Gerber and Drill Files, Fabrication Process and Methodology, Design Rule Checking; Exporting Drill and Gerber Files.
Module 5	Industrial Projects

Course Syllabus:

Note: Students should have PC/ Laptop/ Smart Phone with Internet Connection for the Online Class.

HOW TO APPLY: Interested candidate may apply online through <u>http://14.139.202.67/registration</u>