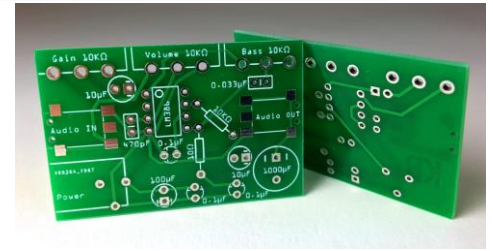


Electronics & PCB Designing

Training + Internship Brochure

What is PCB Designing?

Printed circuit board (PCB) design brings your electronic circuits to life in the physical form. Using layout software, the PCB design process combines component placement and routing to define electrical connectivity on a manufactured circuit board.



What we tend to achieve:

To introduce the students to **PCB Designing and Simulation Workshop** with Hand-on on making **DIY PCBs**.

All Modules are Class Room Activity. Which the student will cover during the regular timings. If they wish to learn more. They will also get free '**Open Development Lab Access**' for free of cost.

Who is this Course For?

Anyone who is interested in Learning **How to design and make a Circuit Board at Home/School/College/Industry** can join the program. Everything is started from scratch, and all the hardware components are provided at Platforuma's Lab.

Break-down for each Session:

- **Theory Sessions:** 20-25 minutes
- **Practical Session:** 40-45 minutes

Program Features:

- Learn conveniently in both **Online & Offline** Mode.
- Get guidance on your learning journey with weekly personalised **mentorship** from industry experts.
- Build practical skills with projects and assignments.
- Step ahead in your career with **Career Assistance Services**.
- **One Development Kit per Student** (No-Sharing of kits allowed)
- No kit purchase burden on Student.

What this program helps you to achieve:

- Learn cutting edge technologies from the best in Indore faculty and Industry experts.
- Lead and contribute to digital transformation projects in the areas of **Electronic Circuits, Simulation** and **Designing** at your workplace & Home.
- Acquire **in-demand skills** and build your candidature for high growth roles and leading technology companies.
- Crack **technical interview rounds** easily during placement & internships.

Content Description:



Elements	Beginners
Duration	4 Weeks
Introduction	Introduction to OHM's Law Fundamentals of Electronics Circuit
Know your electronics tools	Multi-meter Soldering Tools De-soldering tools Tool Set CRO/DSO Power Supply
Understanding Electronics Components:	Resistor Capacitor Inductor
Hand-on on Semi-Conductor:	LEDs p-n junction diode Bi-Polar Junction Transistor Mosfet Zener Diode Laser Diode Photo-resistor
Hand-on Working on Voltage Regulator:	Negative VR Positive VR Variable VR
Understanding Different Types of Switch:	SPST SPDT DPST DPDT Push Button Limit Switch Toggle Switch
Working with Relays	
Using a Transformer in an electric circuit	
Understanding the Use of Rectifier in Electric Circuit	
Working with Logic Gates:	AND Gate OR Gate NOR Gate ANAD Gate
Using Integrated Circuit:	NE 555 Timer IC CD 4017 Decade Counter IC
Working on Software	Introduction to Circuit Simulation Working on Proteus Software
Understanding Micro-Controllers & Micro-Processors	805x, PIC, AVR Micro-controller Family ARM Processor Family
Starting with Arduino	Knowing Arduino Boards

	GPIOs and Pinouts
	Application of Arduino
Working with 2 Different Sensors using Arduino	LED
	Photo-sensor
Working on Multiple Projects:	Minor Projects: 12+ Arduino Projects
	Major Project: 2 Project
Knowing Different Types of PCBs	Single Layer PCBs
	Double Sided PCBs
	Multi-Layer PCBs
Working with Schematic Circuit Diagram	Easy EDA
	Altium Designer
	Eagle
	Solidworks PCB
	Dip Trace
	KiCad EDA
PCB Designing using EasyEDA:	Schematic Circuit
	Convert into Layout Model
	Place Components
	Connect Track
PCB Manufacturing:	Preparing Copper Plate
	Etching Processes
	Sanding Process
	Drilling
	Trouble Shooting
	Soldering
PCB Testing	
Troubleshooting	
Projects	5 PCB Projects

Capstone Projects:

These projects will be covered during the session of '**Hands-on sessions**'. After learning to interface each sensor, projects related to it will be assigned to every individual in a number of steps to complete the project. Full Assistance and Guidance to complete the project will be provided by the faculty in the classroom.

Platforuma Advantages:

- **E-PORTFOLIO**
An e-portfolio is a snapshot of all the projects done and skills acquired during the program that is shareable across social media channels. This will help you showcase your expertise to potential recruiters.
- **RESUME BUILDING AND INTERVIEW PREPARATION**
We help you build your resume to highlight your skills and your previous professional experience. You'll also learn to crack interviews with our interview preparation sessions.
- **PLATFORUMA HIRING BOARD**
The program provides candidate's access to the Platforuma Hiring Board. Organizations approach us with job/internship opportunities that are shared through the Hiring Board with our candidates. We've seen over 20+ alumni transitions to the careers of their choice.
- **CAREER GUIDANCE**
Get access to career mentoring from industry experts who've transitioned to roles in the industry. Benefit from their guidance on how to build a rewarding career.

Program Fee:

Elements	Full Course
Fee	₹ 6000/-

**18% GST Applicable*

***Co-ordinate with us for discounts and offers*

CONTACT US :

+91 8602793619

info@platforuma.com

www.platforuma.com

4-A, Victory Chambers, Geeta Bhawan Square, Indore, M.P. – 452001