

BrinnTech ADVANCED PCB DESIGN & FABRICATION PROGRAM

DURATION
3
MONTHS

PROFESSIONAL PCB ENGINEERING TRACK

DESIGN. FABRICATE. ASSEMBLE. TEST.

Learn Professional PCB Engineering Through
Real Hardware Development.

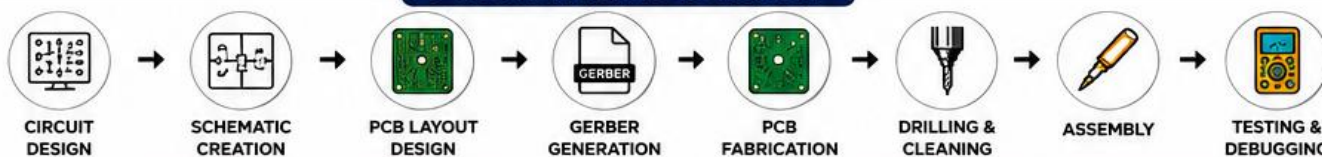
PROGRAM HIGHLIGHTS



WHO CAN JOIN?

- ✓ ECE / EEE / E&I Students
- ✓ Diploma & Engineering Students
- ✓ Electronics & Embedded Enthusiasts
- ✓ Hardware Developers
- ✓ Working Professionals
- ✓ Startup Hardware Builders

PCB ENGINEERING WORKFLOW



MONTH 1 PCB FUNDAMENTALS & ALTIUM DESIGNER

- PCB Fundamentals & Types
- Schematic Design & ERC
- Component Libraries & Footprints
- Altium Designer Interface & Workflow
- Mini Projects: LED Driver, Relay Board, Sensor Interface Circuit



MONTH 2 PCB LAYOUT DESIGN & FABRICATION

- Component Placement & Routing
- Design Rules & DRC Checking
- Gerber, Drill & BOM Generation
- PCB Printing, Etching & Drilling
- Mini Projects: Embedded Controller PCB, Sensor PCB, Power Supply PCB



MONTH 3 ASSEMBLY, TESTING & PRODUCT ENGINEERING

- PCB Assembly & Soldering
- Continuity Testing & Debugging
- Oscilloscope Basics & Signal Analysis
- Prototype Development & Optimization
- Capstone Projects: Smart Socket PCB, Industrial Relay Board, IoT Interface PCB



STUDENT OUTCOMES

- Design Professional PCB Layouts
- Create Schematics Using Altium Designer
- Generate Manufacturing Outputs
- Fabricate PCBs In-House
- Assemble, Test & Debug PCBs
- Develop Prototype PCB Products
- Understand Industrial PCB Workflow

CAPSTONE PROJECTS

- Smart Socket PCB
- Embedded Controller PCB
- Industrial Relay Board
- Sensor Interface Board
- Power Distribution PCB
- IoT Interface PCB

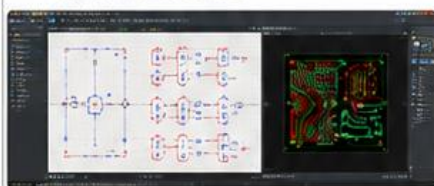


CAREER OPPORTUNITIES

- PCB Design Engineer
- Hardware Design Engineer
- Embedded Hardware Engineer
- Product Development Engineer
- R&D Engineer
- Electronics Design Engineer

MONTH 1 PCB FUNDAMENTALS & ALTIUM DESIGNER

- ✓ **PCB Fundamentals**
 - PCB Types, Materials & Manufacturing Basics
 - Single Layer vs Double Layer PCBs
- ✓ **Altium Designer Essentials**
 - Interface, Projects, Libraries, Components
 - Schematic Design Workflow
- ✓ **Schematic Design**
 - Circuit Capture, Net Labeling
 - ERC & Design Validation
- ✓ **Component Libraries**
 - Symbol & Footprint Creation
 - Library Management
- ✓ **Mini Projects**
 - LED Driver PCB
 - Relay Control Board
 - Sensor Interface Circuit



MONTH 2 PCB LAYOUT DESIGN & FABRICATION

- ✓ **PCB Layout Design**
 - Component Placement Techniques
 - Trace Routing, Power & Ground Routing
 - Design Rules & DRC Checking
- ✓ **Manufacturing Outputs**
 - Gerber Files Generation
 - Drill Files, Pick & Place, BOM
- ✓ **PCB Fabrication Process**
 - PCB Printing
 - Toner Transfer
 - Etching
 - Cleaning
 - Drilling
- ✓ **Mini Projects**
 - Embedded Controller PCB
 - Sensor Board
 - Power Supply PCB
 - Relay Automation PCB

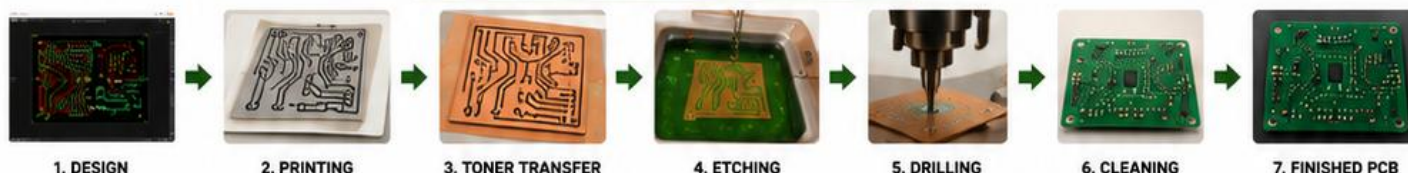


MONTH 3 ASSEMBLY, TESTING & PRODUCT ENGINEERING

- ✓ **PCB Assembly**
 - Component Identification
 - Soldering Techniques
 - Connector & Wire Integration
- ✓ **PCB Testing**
 - Continuity Testing
 - Short Circuit Detection
 - Power & Signal Verification
- ✓ **Debugging & Validation**
 - Oscilloscope Basics
 - Signal Tracing
 - Fault Finding Techniques
- ✓ **Product Engineering**
 - Prototype Development
 - Design Improvement
 - Final Product Validation
- ✓ **Capstone Projects**
 - Smart Socket PCB
 - Industrial Relay Board
 - IoT Interface PCB
 - Power Distribution Board



IN-HOUSE PCB FABRICATION WORKFLOW



TOOLS & TECHNOLOGIES

- PCB Design Software
Altium Designer
- PCB Types
1-Layer & 2-Layer
- Fabrication Method
In-House Chemical Process
- Testing Tools
Oscilloscope, Multimeter,
Testing Instruments
- Outputs
Gerber Files, Drill Files, BOM,
Pick & Place Files

STUDENT OUTCOMES

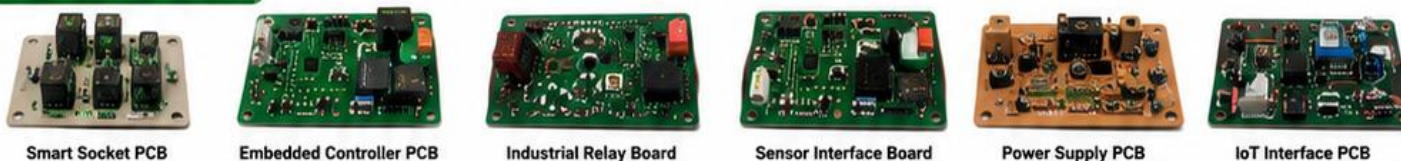
- ✓ Design Professional PCBs using Altium Designer
- ✓ Create 1-Layer & 2-Layer PCB Layouts
- ✓ Generate Industry Standard Manufacturing Outputs
- ✓ Fabricate PCBs In-House
- ✓ Assemble & Test PCBs
- ✓ Debug & Validate Hardware Circuits
- ✓ Develop Real-World Electronic Products
- ✓ Understand Industrial PCB Engineering Workflow



WHAT YOU GET

- Industry Oriented Training
- Practical Hands-on Learning
- Real Hardware Exposure
- Expert Mentorship
- Project Based Learning
- Certification on Completion
- Placement Guidance Support

SAMPLE PROJECTS



DESIGN. FABRICATE. ASSEMBLE. TEST.

BUILD REAL PRODUCTS. BECOME A PCB ENGINEERING PROFESSIONAL.



BRINNTech PCB ENGINEERING CERTIFICATION
Awarded on Successful Completion of the Program



FEE STRUCTURE & BOOKING DETAILS

COURSE DURATION



HANDS-ON | PRACTICAL
INDUSTRY ORIENTED

★ SPECIAL LAUNCHING FEE ★

₹20,000/-

PER STUDENT

LIMITED PERIOD OFFER

ACTUAL FEE

~~₹35,000/-~~

PER STUDENT

WHY THIS FEE?



EXPERT-LED
TRAINING



PRACTICAL &
HANDS-ON
LEARNING



INDUSTRY STANDARD
TOOLS & TECH



REAL-WORLD
PROJECTS



CERTIFICATE
OF COMPLETION



EXPERT
MENTORSHIP

ADVANCE PAYMENT FOR BOOKING

CONFIRM YOUR SEAT BY
PAYING THE ADVANCE

₹5,000/-

(NON-REFUNDABLE)

Balance fee can be paid on
or before the batch start date.

HOW TO BOOK YOUR SEAT?



STEP 1
WHATSAPP
TO BOOK



STEP 2
PAY ADVANCE
₹5,000/-

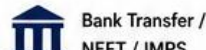


STEP 3
SHARE PAYMENT
SCREENSHOT



STEP 4
GET YOUR SEAT
CONFIRMED

PAYMENT METHODS



Kamesh Prabu



UPI ID: m.kamesh178-3@okaxis

Scan to pay with any UPI app

IMPORTANT NOTES

- This is a special launching offer for a limited period only.
- Advance payment is non-refundable.
- Seats are limited. Early booking is recommended.
- Batch confirmation will be done on a first-come, first-served basis.

FOR BOOKINGS & ENQUIRIES



8870489764

WhatsApp "PCB" to book your seat



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