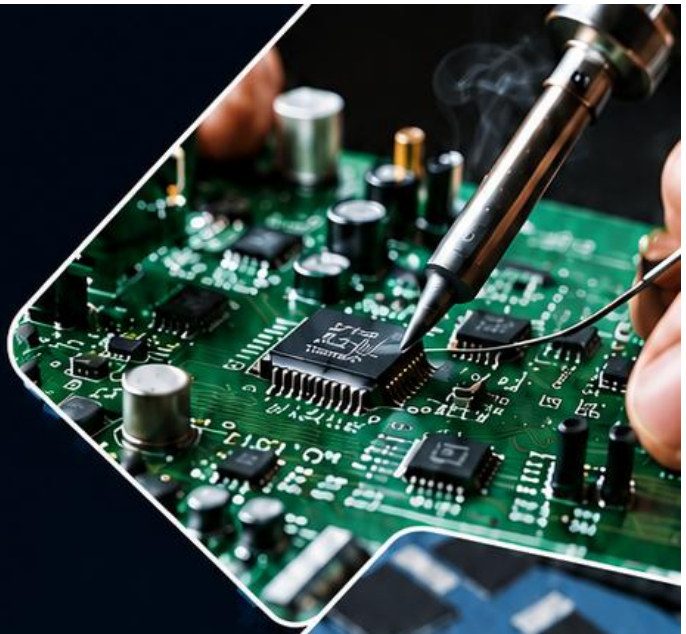
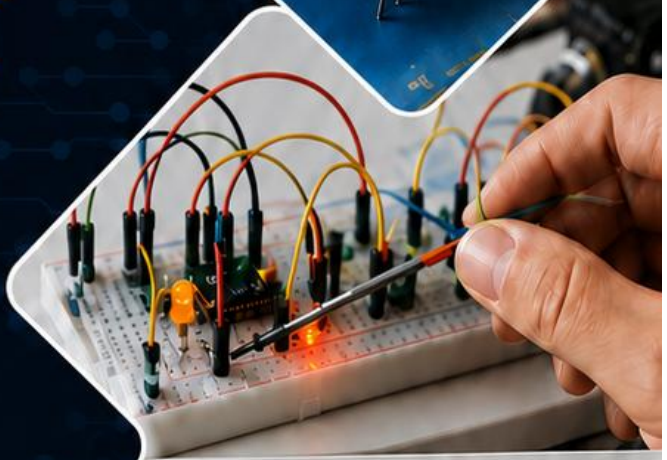
Brinn Tech
Invisible Future

Building Innovation. Developing Engineers.





Brinn Tech's ELECTRONICS PRODUCT DEVELOPMENT ENGINEER PROGRAM

Build Real Electronics Products from Concept to Deployment

- EMBEDDED SYSTEMS
- INDUSTRIAL IoT
- PCB DESIGN
- PRODUCT ENGINEERING

PRACTICAL LEARNING
Hands-on with real hardware & tools

INDUSTRY FOCUSED
Skills aligned with industry needs

EXPERT MENTORSHIP
Learn from experienced engineers

CAREER READY
Build projects. Build your future.

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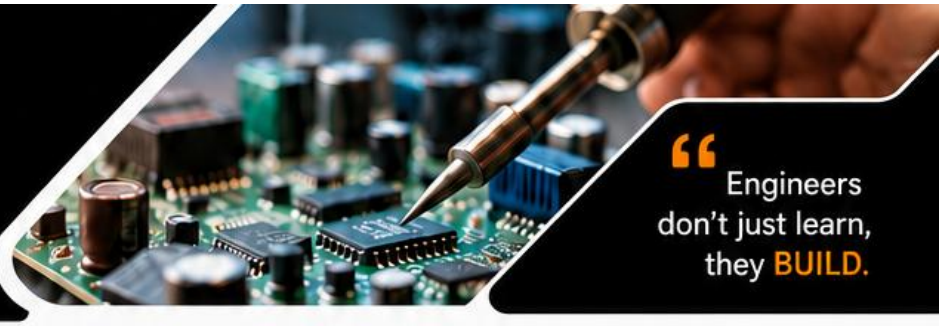


"Engineers don't just learn, they BUILD.

ABOUT THE PROGRAM

Most engineering students learn theory but lack practical product development experience.

Brinn Tech's Electronics Product Development Engineer Program bridges that gap by offering immersive, hands-on training in electronics, embedded systems and IoT.

You won't just study concepts – you will apply them to build real-world products from scratch.

PRACTICAL & HANDS-ON
Learn by building real hardware and prototypes.

REAL HARDWARE EXPOSURE
Work with industry-grade components, tools and equipment.

PRODUCT FOCUSED
Build end-to-end products from idea to working prototype.

IOT & CONNECTIVITY
Hands-on with modern communication protocols and cloud platforms.

EXPERT MENTORSHIP
Learn from experienced engineers and industry professionals.

CODING + ELECTRONICS
Strong foundation in programming and circuit design together.

WHY CHOOSE BRINNTECH?

BrinnTech focuses on **outcome-based learning** that transforms you into a product development engineer.

Brinn Tech	VS	TRADITIONAL INSTITUTES
Product-based learning		Theory-based learning
Real hardware & tools		Simulation only
PCB fabrication exposure		No hardware exposure
Small batch mentoring		Large classroom teaching
Real-world debugging		Limited practical experience
Industry-oriented projects		Outdated curriculum
End-to-end product development		Partial knowledge
Continuous guidance & support		Limited mentoring and support

PROGRAM IMPACT

20+ HANDS-ON PROJECTS

10+ INDUSTRY TOOLS & PLATFORMS

100% PRACTICAL LEARNING

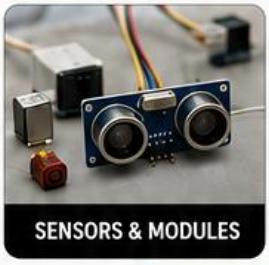
CAREER FOCUSED SKILL DEVELOPMENT

YOU WILL WORK WITH


PCB DESIGN


SOLDERING & ASSEMBLY


EMBEDDED SYSTEMS


SENSORS & MODULES


IOT & CLOUD

"LEARN BY BUILDING **REAL ELECTRONICS PRODUCTS** AND BECOME THE ENGINEER INDUSTRY NEEDS.

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"We don't just teach circuits, we build engineers who build products that make an impact.

PROGRAM MODULES

A structured path to transform you into a Product Development Engineer

01 ELECTRONICS FUNDAMENTALS

Learn circuit theory, components, semiconductor devices and design stable, efficient electronic circuits from the ground up.

- Resistors, Capacitors
- Diodes, Transistors
- Op-Amps & ICs
- Power Supplies
- Circuit Analysis

02 EMBEDDED HARDWARE DESIGN

Design microcontroller based circuits using raw ICs and build reliable embedded hardware systems.

- Microcontroller Architecture
- Clock, Reset, Power Circuits
- Memory & Peripherals
- Analog & Digital Design
- Protection Circuits

03 EMBEDDED FIRMWARE DEVELOPMENT

Write efficient firmware in C and assembly for microcontrollers without using development boards.

- C Programming (Bare Metal)
- Registers & Peripherals
- Interrupts & Timers
- Low Power Techniques
- Bootloader Concepts

04 COMMUNICATION INTERFACING

Interface and implement industrial communication protocols for embedded systems.

- I2C / SPI / UART
- CAN / RS485
- Modbus Protocol
- Data Framing & Parsing
- Error Handling

05 SENSOR & ACTUATOR SYSTEMS

Interface real-world sensors and actuators and process signals accurately for smart applications.

- Analog Signal Conditioning
- ADC / DAC
- Sensor Calibration
- Actuators & Drivers
- Filtering Techniques

06 PCB DESIGN & FABRICATION

Design professional PCBs and experience the entire fabrication process from design to product.

- Schematic Capture
- PCB Layout (Multi-layer)
- DFM & Design Rules
- Fabrication Process
- Assembly Techniques

07 TESTING & DEBUGGING

Use industry tools and techniques to test, debug and validate electronic products.

- Oscilloscope Usage
- Multimeter & Analyzer
- Signal Debugging
- EMI / Noise Handling
- Reliability Testing

08 PRODUCT DEVELOPMENT CAPSTONE

Design, develop and build a complete electronics product from concept to working prototype.

- Requirement Analysis
- Design & Implementation
- Prototyping & Integration
- Testing & Optimization
- Final Product

KEY SKILLS YOU WILL GAIN

- Design electronic circuits using raw components and ICs
- Develop firmware for microcontrollers without dev boards
- Implement industrial communication protocols
- Design professional PCBs and bring them to life
- Test, debug and optimize real-world hardware
- Build complete embedded products from scratch

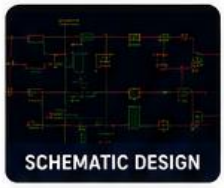
LEARNING OUTCOMES

- Build strong fundamentals in electronics and embedded systems
- Design and develop hardware using raw chips and components
- Program microcontrollers at register and peripheral level
- Design custom PCBs and understand the fabrication process
- Test, debug and optimize real products like an industry engineer
- Develop end-to-end product development skills for your career
- Be industry ready for core electronics roles and R&D positions

FROM COMPONENTS TO COMPLETE PRODUCTS
LEARN. DESIGN. BUILD. DEPLOY.

Real Engineering.
Real Skills. Real Impact.

TOOLS & TECHNOLOGIES YOU WILL WORK WITH



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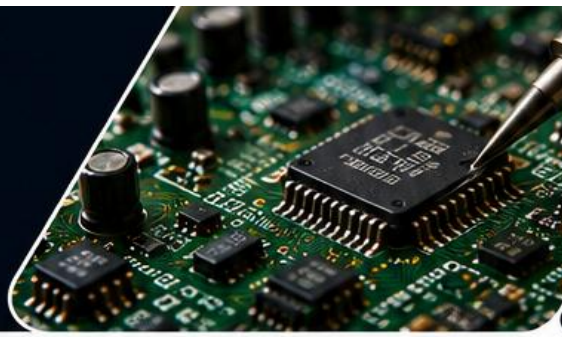


"Engineered with Knowledge. Built with Passion. Made for Impact."

HANDS-ON PROJECTS

Learn by building real electronics products from scratch

01 SMART SOCKET TIMER

Build a timer based automated 3-pin socket with relay control and LED indication.

Skills: Timing, Relay Control, Power Circuits

02 SMART ROOM MONITOR

Monitor temperature, humidity, light and air quality with display and alerts.

Skills: Sensor Interfacing, LCD, Data Processing

03 INDUSTRIAL I/O CONTROLLER

Design and build an I/O controller for real world industrial applications.

Skills: I/O, Opto-Isolation, Embedded Control

04 RELAY AUTOMATION SYSTEM

Build a multi-channel relay system with manual and automatic control logic.

Skills: Relay Drivers, Logic Design, Safety

05 INDUSTRIAL IoT NODE

Develop an IoT node with data logging and cloud connectivity.

Skills: Communication, IoT Integration, Cloud

MORE PROJECTS • CUSTOM PCB PROJECT • CAPSTONE INDUSTRIAL PROJECT

FROM CONCEPT TO PRODUCT – THE ENGINEERING WORKFLOW

REQUIREMENT ANALYSIS

Understand the problem and define specifications.

CIRCUIT DESIGN

Design circuits using industry standard techniques.

PCB DESIGN

Create professional PCB layouts for manufacturing.

FABRICATION

Experience real PCB fabrication from manufacturing partners.

ASSEMBLY

Assemble and test boards with precision soldering.

TESTING & VALIDATION

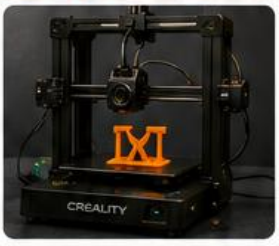
Validate, debug and ensure product reliability.

FINAL PRODUCT

A fully functional product ready for real world use.

R&D LAB FACILITIES

- PCB Design Workstations
- Soldering & Rework Stations
- Component Testing Lab
- Oscilloscopes & Analyzers
- 3D Printing & Prototyping
- Microcontroller Programmers
- Power Supplies & Instruments
- Raw Components Library



WHY THIS PROGRAM?

INDUSTRY RELEVANT
Curriculum designed as per industry standards and requirements.

PRACTICAL & APPLIED
80% practical learning with real hardware and real challenges.

EXPERT MENTORS
Learn from engineers with industry and R&D experience.

CAREER ORIENTED
Build strong skills for jobs, internships and higher studies.

INNOVATE & BUILD
Work on exciting projects and develop products that solve real problems.

TURN YOUR IDEAS INTO REAL PRODUCTS.
BECOME AN ELECTRONICS PRODUCT DEVELOPMENT ENGINEER.

REAL ENGINEERING. REAL SKILLS. REAL IMPACT.

JOIN THE NEXT GENERATION OF PRODUCT ENGINEERS

LIMITED SEATS – ENROLL NOW!
Next Batch Starting Soon

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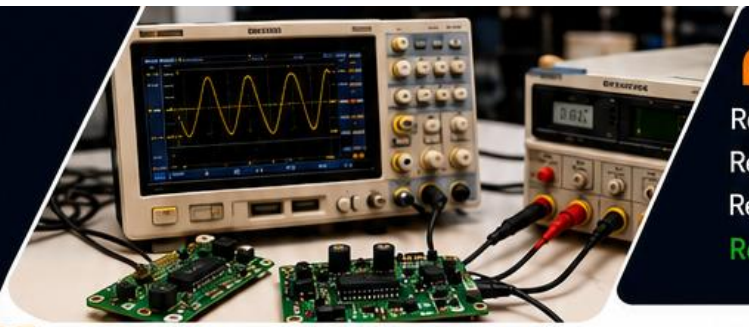
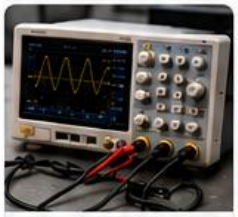


Real Lab.
Real Experience.
Real Engineering.
Real Impact.

R&D LAB INFRASTRUCTURE

Industry-grade facilities to give you real engineering exposure



OSCILLOSCOPES

- Signal analysis
- Waveform debugging
- Circuit validation

POWER SUPPLIES

- Regulated DC supplies
- Multi-output sources
- Circuit testing

SOLDERING & REWORK

- Temperature controlled
- SMD rework station
- Precision soldering

PCB FABRICATION

- PCB etching
- Drilling & cleaning
- Professional finishing

3D PRINTING

- Enclosure & parts
- Jigs, fixtures, holders
- Rapid prototyping

PROGRAMMERS

- IC programming
- Firmware upload
- Chip level debugging

COMPONENT LAB

- Wide range of components
- ICs, sensors, modules
- Quality assured parts

TEST & MEASUREMENT

- Multimeters & LCR meters
- Signal generators
- Frequency counters

MICROCONTROLLERS

- PIC, AVR, ARM, STM8
- Standalone development
- Real chip experience

SENSORS & MODULES

- Industrial grade sensors
- Communication modules
- Interface & control

ENGINEERING WORKSTATIONS

- Individual workspaces
- Tools & documentation
- Project development

PARTS & TOOLS LIBRARY

- Organized inventory
- Easy availability
- Build without limits

PCB FABRICATION – FROM DESIGN TO REAL BOARD

01 DESIGN

Schematic capture & PCB layout design

02 PRINT

High resolution laser printing

03 ETCH

Chemical etching for copper removal

04 DRILL

Precision drilling for components

05 SOLDER MASK

Solder mask coating for protection

06 SILK SCREEN

Component labeling & silk printing

07 FINAL BOARD

Tested, cleaned & ready to assemble

WHAT YOU WILL WORK ON

Circuit Design & Analysis
Design stable and efficient circuits using industry practices.

Embedded Hardware Design
Build hardware from raw components and microcontrollers.

PCB Design & Development
Design high quality PCBs and experience the complete fabrication process.

Firmware Development
Write efficient, optimized firmware for real world applications.

Testing & Debugging
Use industry tools to test, debug and validate your designs.

Product Building
Assemble, test and build complete working electronic products.

LEARN BY BUILDING REAL ELECTRONICS PRODUCTS
FROM RAW COMPONENTS TO INDUSTRY READY SOLUTIONS

WHY BRINNTECH LAB?

INDUSTRY STANDARD EQUIPMENT
Work on tools and instruments used in real industries.

HANDS-ON PRACTICAL LEARNING
More building. Less theory. Real skills that matter.

SMALL BATCHES
Personal attention and better mentorship.

PROJECT BASED APPROACH
Build, test and deploy real world solutions.

FULL SUPPORT
Guidance, doubt clearing and continuous technical support.

SAFE & PROFESSIONAL ENVIRONMENT
Well equipped, organized and inspiring workspace.

STUDENT BUILT PRODUCTS

READY TO BUILD YOUR FUTURE?

Call or WhatsApp for Enquiries

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ENROLL IN THE NEXT BATCH

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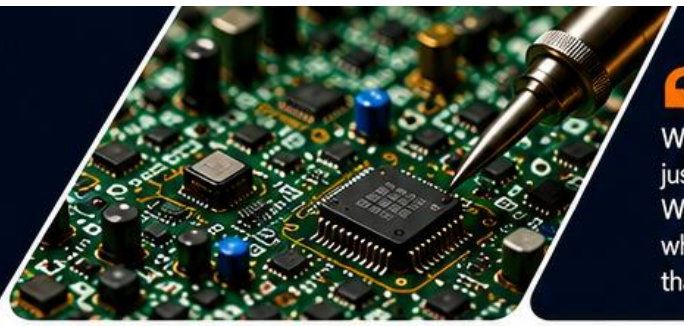


"We don't just teach electronics. We build engineers who build products that make an impact.

YOUR JOURNEY TO BECOME A PRODUCT DEVELOPMENT ENGINEER

01 FUNDAMENTALS
Learn electronics basics, components and circuit theory.

02 HARDWARE DESIGN
Design circuits using ICs and build reliable embedded hardware.

03 FIRMWARE DEVELOPMENT
Write efficient code for microcontrollers using industry standard tools.

04 INTERACING & PROTOCOLS
Implement industrial communication and sensor interfaces.

05 PCB DESIGN & FABRICATION
Design professional PCBs and experience the complete manufacturing process.

06 TESTING & VALIDATION
Use industry tools to test, debug and validate real world products.

07 PRODUCT DEVELOPMENT
Build, integrate and deploy complete electronics products.

INDUSTRY GRADE PROJECTS

Build. Test. Validate. Deploy.

SMART SOCKET
- Energy monitoring with protection
- Relay control & timing
- Overload protection

Skills: Power Electronics, Embedded Control, PCB

SMPS DESIGN
- AC-DC SMPS design
- Regulation & efficiency
- Protections & testing

Skills: Power Electronics, Circuit Design, PCB

MOTOR CONTROLLER
- BLDC / DC motor control
- Speed & direction control
- Feedback & protection

Skills: Embedded Control, Power Electronics, PCB

DATA LOGGER
- Sensor data acquisition
- SD card data logging
- Real time clock

Skills: Data Logging, MCU, Interface Design

INDUSTRIAL I/O MODULE
- Digital & analog I/O
- Isolation & protection
- RS485 / Modbus

Skills: Industrial Communication, Isolation, PCB Design

IoT DEVICE
- WiFi / Ethernet enabled
- Cloud data logging
- Remote monitoring

Skills: IoT, Cloud, Embedded Systems, Communication

TOOLS & TECHNOLOGIES YOU WILL MASTER

SCHEMATIC DESIGN
Design circuits using industry standard tools (Altium / EasyEDA)

PCB LAYOUT
Create multi-layer PCBs with DFM best practices

PROGRAMMERS
Program MCUs, ICs and memory devices using professional tools

OSCILLOSCOPES
Analyze signals and debug hardware like an engineer

POWER SUPPLIES
Test and power your designs with precision and reliability

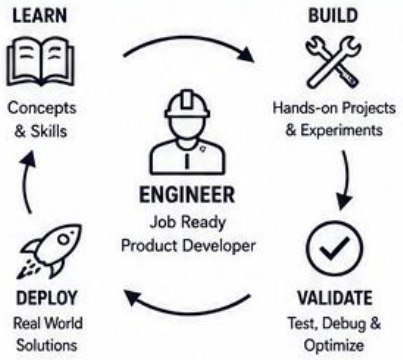
TEST & MEASUREMENT
Use industry grade tools for accurate testing and validation

SOLDERING & REWORK
Precision soldering and rework for professional assembly

WHY ENROLL IN THIS PROGRAM?

- **REAL ENGINEERING APPROACH** — Learn by building real products from scratch.
- **HANDS-ON LEARNING** — 80% practical. Build, test and debug real hardware.
- **INDUSTRY RELEVANT CURRICULUM** — Designed with inputs from industry experts.
- **EXPERT MENTORS** — Learn from experienced engineers and innovators.
- **STRONG PORTFOLIO** — Build a portfolio of working products to showcase your skills.

STUDENT JOURNEY – FROM LEARNER TO ENGINEER



WHO SHOULD JOIN?

- Diploma / Engineering Students
- Electronics Enthusiasts
- Aspiring Product Engineers
- Working Professionals (Upskill)
- Entrepreneurs & Startups

CAREER OPPORTUNITIES

- Embedded Hardware Engineer
- PCB Design Engineer
- Firmware Developer
- Test & Validation Engineer
- Product Development Engineer
- R&D Engineer in Core Electronics

INTERNSHIP OPPORTUNITIES
Work on live projects and real problems.

CERTIFICATION
Get industry recognized certificate from BrinnTech R&D Lab.

PLACEMENT ASSISTANCE
Interview preparation, resume building & more.

INDUSTRY CONNECT
Exposure to industry standards & practices.

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BRINNTECH
EMBEDDED & IOT PRODUCT DEVELOPMENT ENGINEER PROGRAM

DURATION 6 MONTHS

INDUSTRIAL EMBEDDED & IOT PRODUCT DEVELOPMENT TRACK

FEE STRUCTURE & BOOKING DETAILS

COURSE DURATION
6 MONTHS

HANDS-ON | PRACTICAL
INDUSTRY ORIENTED

★ SPECIAL LAUNCHING FEE ★
₹40,000/-

PER STUDENT

LIMITED PERIOD OFFER

ACTUAL COURSE FEE
~~₹75,000/-~~

PER STUDENT

WHY THIS FEE?

- EXPERT-LED PRODUCT DEVELOPMENT TRAINING
- 100% HANDS-ON PRACTICAL LEARNING
- INDUSTRIAL EMBEDDED SYSTEMS & IOT
- REAL PRODUCT DEVELOPMENT PROJECTS
- CERTIFICATE OF COMPLETION
- EXPERT MENTORSHIP & CAREER GUIDANCE

ADVANCE PAYMENT FOR BOOKING

CONFIRM YOUR SEAT BY PAYING THE ADVANCE

₹10,000/-

(NON-REFUNDABLE)

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

HOW TO BOOK YOUR SEAT?

- STEP 1 — WHATSAPP TO BOOK
- STEP 2 — PAY ADVANCE ₹10,000/-
- STEP 3 — SHARE PAYMENT SCREENSHOT
- STEP 4 — SEAT CONFIRMED

PAYMENT METHODS

UPI (UNIFIED PAYMENTS INTERFACE) | Google Pay | PhonePe | Bank Transfer NEFT / IMPS

IMPORTANT NOTES

- Special Launching Offer valid for a limited period only.
- Limited Seats Available.
- Early Booking is Highly Recommended.
- Advance Payment is Non-Refundable.
- Seats are confirmed only after advance payment.
- Batch confirmation is on a First-Come, First-Served basis.

Kamesh Prabu

UPI ID: m.kamesh178-3@okaxis

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LEARN | DESIGN | BUILD | TEST | DEPLOY