



# ELECTRONICS & ELECTRICAL ENGINEERING INTERNSHIP PROGRAM



## Program Overview

### PROGRAM NAME

Electronics & Electrical Engineering  
Internship

### DURATION

Flexible semester-wise program  
based on student requirements

### MODE OF TRAINING

Hybrid (Online + Offline)

### TRAINING APPROACH

Comprehensive hands-on learning  
with industry tools



## Eligibility Criteria

### Academic Background

Diploma / UG / PG  
students of ECE and  
EEE streams

### Interest Areas

Students interested in  
Electronics, Electrical  
Systems, and Circuit  
Design

### Experience Level

Beginners to  
intermediate students  
wanting to build  
technical foundation

### Prerequisites

- ✓ Basic knowledge of electrical circuits and electronic components
- ✓ Understanding of fundamental mathematics (algebra, trigonometry)
- ✓ Familiarity with basic physics concepts (current, voltage, resistance)
- ✓ Computer literacy and internet access for online sessions
- ✓ Interest in hands-on practical work and problem-solving



# Semester-wise Curriculum

## Semester I – Foundations of Electronics & Electrical Engineering

- Introduction to Electronics and Electrical Engineering fields
- Overview of embedded systems and their applications
- Tools for drawing circuit diagrams and schematics
- Basic electronics terminology and fundamental concepts
- Industry overview and career opportunities in ECE/EEE
- Introduction to electronic components and their functions

## Semester II – Component Basics & Fundamentals

- Learn about Resistors, Capacitors, LEDs, Transistors, ICs
- How to check connectivity using a Multimeter
- Safety protocols in handling electronics
- Component identification and specifications
- Basic circuit analysis and Ohm's law applications
- Introduction to breadboard prototyping

## Semester III – Signal Testing & PCB Design

- Using CRO (Cathode Ray Oscilloscope) and DSO
- Measuring and analyzing different types of signals
- PCB board design basics and best practices
- Introduction to design software tools
- Signal integrity and noise considerations
- Schematic capture and component placement

## Semester IV – Troubleshooting & Repair

- How to detect and fix faults in electronic boards
- Replacing components step-by-step procedures
- Real-time debugging examples and case studies
- Advanced testing techniques and methodologies
- Documentation and reporting of repairs
- Preventive maintenance of electronic systems

## Semester V – Project Development & Assembly

- How to design your own circuit board from scratch
- Professional soldering and assembling techniques
- Building a comprehensive mini project independently
- Project documentation and presentation skills
- Industry-standard testing and validation
- Portfolio development and career preparation

## Learning Outcomes

Upon completion of this internship, students will be able to:

 Design and analyze basic electronic circuits

 Use professional testing equipment effectively

 Create PCB designs using industry software

 Troubleshoot and repair electronic systems

 Apply safety protocols in electronics

 Document and present technical work

## Key Benefits & Features



### Practical Lab Experience

Hands-on training with CRO, DSO, and soldering equipment



### Real-world Skills

Industry-relevant circuit design and troubleshooting abilities



### Confidence Building

Boost confidence in handling complex electronics



### Professional Certification

Industry-recognized certificates for each semester



### Career Enhancement

Excellent addition to resume and final-year projects



### Expert Mentorship

Learn from experienced industry professionals



## Certification & Assessment

### SEMESTER-WISE CERTIFICATES

Individual certificate awarded upon successful completion of each semester

### SKILLS ASSESSMENT

Practical evaluation and project-based assessment for each semester

### PROGRESS TRACKING

Continuous monitoring and feedback throughout the program

### INDUSTRY RECOGNITION

Certificates recognized by leading electronics companies



## How to Apply

1. **Contact us** via email or phone using the details provided below
2. **Submit** your academic details and specific area of interest
3. **Receive** program confirmation and detailed information
4. **Complete** enrollment process to secure your position
5. **Access** study materials and training schedule



## Contact Information

EMAIL ADDRESS

[aspintechno@gmail.com](mailto:aspintechno@gmail.com)

PHONE NUMBER

+91-7695946008

WEBSITE

[aspintechnologies.in](http://aspintechnologies.in)

### Program Highlights

- Industry-standard equipment training
- Real-world project implementation
  - Semester-wise skill progression
- Professional certification pathway

### What Makes Us Different

- Flexible semester-based learning
- Hybrid online + offline approach
- Hands-on practical experience
- Expert mentorship and guidance

***Ready to start your journey in Electronics & Electrical Engineering?***

*Contact us today to discuss your internship requirements and customize your learning path.*