



Vishnu Waman Thakur Charitable Trust's  
**VIVA Institute of Technology**

Approved by AICTE New Delhi, Recognized by DTE, Govt. of Maharashtra

And Affiliated to University of Mumbai

**NAAC "B++" Grade**

*Department of Electronics and Telecommunication Engineering*

Name of Course: PCB TESTING,  
DEBUGGING AND  
TROUBLESHOOTING.

Duration: 30 hours

Sr.no	Contents	Hrs.
1	<b>PCB debugging:</b> <ul style="list-style-type: none"><li>• Introduction.</li><li>• Testing tools.</li><li>• Component description and value.</li><li>• Methods of Testing.</li></ul>	10
2	<b>PCB testing:</b> <ul style="list-style-type: none"><li>• Cold testing.</li><li>• Supply testing.</li><li>• Soldering</li><li>• Desoldering</li><li>• Final testing</li></ul>	20



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# Report

**Duration:**

**Venue: VIVA Institute Of Technology, Shirgaon.**

Electronics & Telecommunication Engineering Department of VIVA Institute of Technology organized a 30 hours' certificate course on "PCB TESTING, DEBUGGING AND TROUBLESHOOTING." during **8<sup>th</sup> January 2024 to 2<sup>nd</sup> May 2024.**

The workshop was basically aimed to provide basic knowledge to second year of semester 4–EXTC students of PCB testing and debugging which was conducted by Prof.Kushal Suvarna as the speaker who guided the participants regarding how troubleshooting of PCB is done and the PCB is repaired.

Students were taught how to use multimeter and do testing using multimeter and how track is repaired and how components are replaced.

The students gave positive feedback for the bridge course and the curriculum gap was filled regarding PCB troubleshooting.



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## Course Objectives

1. To understand the basic fundamentals of using multimeter for testing
2. To understand the basic fundamentals of pcb debugging.
3. To understand the basic fundamentals of fault removal.

## Course Outcomes:

After successful completion of the course, the students are able to

1. To know the basics of multimeter.
2. To know the basics of pcb debugging and fault finding.
3. To test faults in pcb by cold testing and to know the fundamentals of supply testing.





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# Model Certificate

	Vishnu Waman Thakur Charitable Trust's <b>VIVA Institute of Technology</b> Shirgaon, Virar (East), Dist: Palghar-401305, Maharashtra Website: <a href="http://www.viva-technology.org">www.viva-technology.org</a> NAAC "B++" Grade
<h2>Certificate of Appreciation</h2>	
This to certify that Mr. / Ms. _____ student of <b>Electronics &amp; Telecommunication Department</b> has successfully completed bridge course on <b>"PCB TESTING, DEBUGGING AND TROUBLESHOOTING"</b> at VIVA Institute of Technology, Shirgaon, Virar(E) conducted between 9 <sup>th</sup> January 2024 to 2 <sup>nd</sup> April 2024. His / Her contribution is appreciated.	
 (Mrs. Archana Ingle) HEAD OF DEPARTMENT	 (Dr. Arun Kumar) Principal



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## STUDENT CERTIFICATE

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<h3>Certificate of Appreciation</h3>	
This to certify that Mr. / Ms. <u>PRAJAPATI MANISH BHANU CHAINMATI</u> student of <b>Electronics &amp; Telecommunication Department</b> has successfully completed bridge course on <b>"PCB TESTING, DEBUGGING AND TROUBLESHOOTING"</b> at VIVA Institute of Technology, Shirgaon, Virar(E) conducted between 9 <sup>th</sup> January 2024 to 2 <sup>nd</sup> April 2024. His / Her contribution is appreciated.	
 (Mrs. Archana Ingle) HEAD OF DEPARTMENT	 (Dr. Arun Kumar) Principal