



**KONGUNADU ARTS AND SCIENCE COLLEGE  
(AUTONOMOUS)**

**Re-accredited by NAAC with A<sup>+</sup> Grade - 4<sup>th</sup> cycle,  
College of Excellence – UGC  
29<sup>th</sup> Rank among Colleges in NIRF 2023  
Coimbatore - 641 029, Tamil Nadu, India**



**DEPARTMENT OF COMPUTER SCIENCE (Aided)**

Chip-Level Testing and Debugging for Mobile Phones and Tablets

Supported by

**DBT STAR COLLEGE SCHEME  
REPORT**

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Name of the Event                | Hands on Training on Chip-Level Testing and Debugging for Mobile Phones and Tablets                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Date                             | 22-01-2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Time                             | 10.00 AM to 4.00PM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Resource Person With Designation | Mr.A.Sajith & Mr.R.Karthi Service Technicians & Trainers, New Technology Institutions, Coimbatore                                                                                                                                                                                                                                                                                                                                                                                                                |
| Venue of the Programme           | Lab VI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Objectives of the Programme      | <ul style="list-style-type: none"><li>• To teach the skills required to repair mobile phones.</li><li>• To explain the methods of testing and solving problems from the chip-level mobile services.</li><li>• To create awareness about the tools and instruments that can be used in mobile services.</li></ul>                                                                                                                                                                                                 |
| Outcome of the Programme         | <ul style="list-style-type: none"><li>• Participants gained a deeper understanding of chip-level testing methodologies and debugging techniques specific to mobile devices, allowing them to approach hardware testing with confidence and precision.</li><li>• Through hands-on exercises and real world case studies, attendees developed practical skills in using testing tools, conducting boundary scan testing (BST) , implementing built-in self-test (BIST) methods , and diagnosing hardware</li></ul> |

|                                    |                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | faults effectively. <ul style="list-style-type: none"> <li>• The workshop emphasized the importance of quality assurance in mobile service manufacturing , equipping participants with knowledge of compliance standards, best practices, and quality control measures necessary to ensure product reliability.</li> </ul> |
| Number of Beneficiaries with Class | <b>Students: 60</b><br>II B.Sc Computer Science                                                                                                                                                                                                                                                                            |

### Report in detail:

The chip-level testing and debugging workshop for mobile phones and tablets offered a comprehensive study of hardware testing and troubleshooting. Participants explored into essential concepts, tools, and methodologies essential for ensuring the quality and reliability of mobile device hardware. The workshop served as a platform to bridge theoretical knowledge with practical hands-on experience, equipping attendees with valuable skills and insights crucial for navigating the complexities of chip-level testing in the mobile technology landscape.

After attending the chip-level testing and debugging workshop for mobile phones and tablets, participants gained comprehensive insights into various aspects of hardware testing and troubleshooting. The workshop began with an introduction to chip-level testing methodologies, emphasizing their significance in ensuring mobile device reliability. Participants delved into the basics of mobile device hardware, understanding the details of components such as CPUs, GPUs, and sensors. Practical sessions with testing tools and equipment enhanced their hands-on skills, while discussions on boundary scan testing (BST), built-in self-test (BIST) methods, and functional testing of integrated circuits (ICs) provided a deeper understanding of chip-level testing techniques.

The workshop also focused on debugging common hardware issues and applying best practices for quality assurance and compliance with industry standards. Real-world case studies and practical exercises allowed participants to apply their learning to solve complex hardware challenges.

The workshop concluded with discussions on future trends in chip-level testing and networking opportunities with industry experts, leaving participants equipped with valuable knowledge and skills to excel in mobile device hardware testing and debugging.



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(UGC)Coimbatore - 641029.

### DEPARTMENT OF COMPUTER SCIENCE(AIDED)

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**Name of the Event: Hands-on Training on “Chip-Level Testing and Debugging for Mobile Phones and Tablets**

**Date:22/01/2024**

**Venue: Computer Lab VI**

