

## **Secure Software Development and Testing**





# 20 to 24 December 2024, Physical Mode Only Organized by IIITDM Kancheepuram, Chennai-600 127

Venue	Physical Mode About US: http://web.iiitdm.ac.in/noor/		
Objective	<ul> <li>A boot camp on Secure Software Development and Testing is an immersive, intensive training program designed to equip participants with essential skills and knowledge for creating and testing secure software applications. This boot camp typically covers a range of secure coding practices, vulnerability identification, secure testing methods, and the latest security standards and compliance requirements.</li> <li>Understand Secure Development Lifecycle (SDL): Familiarize participants with secure development practices integrated into the software development lifecycle to ensure security is built in from the beginning.</li> <li>Learn Secure Coding Standards: Teach participants how to write code that avoids common vulnerabilities, adheres to secure coding standards, and mitigates potential threats.</li> <li>Implement Security Testing Techniques: Equip participants with the skills to perform various security tests, such as static code analysis, penetration testing, and vulnerability scanning.</li> <li>Develop Incident Response Knowledge: Enable participants to understand how to respond to security incidents and implement fixes swiftly.</li> </ul>		
Topics to be Covered	<ul> <li>Introduction to Secure Software Development</li> <li>Understanding Threat Modeling</li> <li>Secure Coding Practices</li> <li>Secure Software Testing Techniques</li> <li>Vulnerabilities in the systems and Software</li> <li>Vulnerabilities Assessments and Risk Assessment</li> <li>24 Deadly sins of Software Programming</li> <li>Application Security</li> </ul>		
Target Audience	B. Tech/M. Tech/MCA/BCA/MSc/BSc and PhD Students working in the area of Cyber Security and Programming.		
Prerequisite	Participant should have the basic working knowledge of Python Programming or any other.		
Registration Details	Registration Link: <a href="https://forms.gle/2mitHoASPrAP3QhF9">https://forms.gle/2mitHoASPrAP3QhF9</a>		
Registration Fees	NIL (Recommendation Letter and approval from HOD/Dean/Principal/Director in the prescribed form is necessary to confirm your registration)		
Payment	NIL (for Registration, Food and Hostel Type Accommodation for All 5 Days)		
Contact Info:	Dr Noor Mahammad Sk, Organizing Chair (http://web.iiitdm.ac.in/noor/) Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Kancheepuram Melakottaiyur, Vandalur - Kelambakkam Road, Chennai - 600 127, Tamil Nadu, India. For enquiry and clarification, please contact: Email: noor@iiitdm.ac.in; 91760 10587(M)		

Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kancheepuram in Centrally Funded Technical Institute under Ministry of Education. www.iiitdm.ac.in



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		Time (Hrs)	Topic	
DAY 1	DEC 2024	0930-1100	Boot Camp Orientation	
		1115-1230	Software Installations and Configuration	
		1400-1530	Hands-On Session1: SQL Injection	
	20	1530-1700	Hands-On Session2: Buffer Overruns	
DAY 2	4	0930-1100	Computer and Network Vulnerabilities	
	2024	1115-1230	Introduction to Secure Software Development	
	DEC	1400-1530	Hands-On Session3: Format String Problems	
	21	1530-1700	Hands-On Session4: Integer Overflows	
DAY 3	2024	0930-1100	Hands-On Session5: Vulnerability Assessment Tools	
		1115-1230	Hands-On Session6: Using Cryptography Incorrectly	
	DEC	1400-1530	Hands-On Session7: C++ Catastrophes	
	22	1530-1700	Hands-On Session8: Command Injection	
	2024	0930-1100	Hands-On Session9: Use of Weak Password	
<b>7</b> 4	2 20	1115-1230	Hands-On Session10: Information Leakage	
DAY	DEC	1400-1530	Hands-On Session11: Failure to Handle Errors Correctly	
	23	1530-1700	Hands-On Session12: Race Conditions	
DAY 5	24 DEC 2024	0930-1100	SSDLC Tools and Techniques	
		1115-1230	Hands-On Session13: Executing Code with Too much privileges	
		1400-1530	Hands-On Session14: Web Server Related Vulnerabilities	
	2	1530-1700	Hands-On Session15: Web Client Related Vulnerabilities	



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#### **Resource Person Details:**

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Dr Noor Mahammad Sk	Associate Professor, Dept of CSE., Indian Institute
	of Information Technology Design and
	Manufacturing Kancheepuram, Chennai.
Dr Sanjeet Kumar Nayak	Asst. Professor, Dept of CSE., Indian Institute of
	Information Technology Design and
	Manufacturing Kancheepuram, Chennai.
Dr B Krishna Priya	Asst. Professor, Dept of CSE., Indian Institute of
	Information Technology Design and
	Manufacturing Kancheepuram, Chennai.
Dr Gnanambiakai	Asst. Professor, Dept of CSE., Indian Institute of
	Information Technology Design and
	Manufacturing Kancheepuram, Chennai.
Dr Dhayalakumar M	Project Staff, ISEA Phase 3, IIITDM
	Kancheepuram
Mr V Nagasai	Project Staff, ISEA Phase 3, IIITDM
	Kancheepuram



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## **Recommendation Letter for Students**

(Duly signed by HoD/Dean/Director/VC/Principal of the Institute)

This is to Certify that Mr/Ms	Designation with
of Department of	Organization
name	is approved to
attend the one week Boot Camp on Secure Softwa	re Development and Testing, sponsored b
ISEA Phase 3 by Ministry of Electronics and Info	rmation Technology Government of India
organized by Indian Institute of Information	Technology Design and Manufacturing
Kancheepuram, Chennai – 600 127, during the perio	d of 20 December to 24 December 2024.
Signature of the Attendee:	
Date:	Signature of
Place:	(HoD/Dean/Principal/Director/VC)
	Name:
	Seal:
Note: Kindly upload the scanned copy for registratio	n confirmation.

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