Training on

Secure Software Development Lifecycle Practices Professional Certification Program

C-DAC, Hyderabad and IIT Bhilai

Conduction Mode   : Online

Date   **:** June 30, 2025 – July 11, 2025

Timings   **:** 10:00 AM to 12:00 PM & 2.30 PM to 4.30 PM

Registration Link   **:** https://forms.gle/HbyuebsBXaxyVay38

Certification Link   **:** https://forms.gle/2wnrJTQ3snB5UXen8

Instruction Details   **:**

- Resource persons will deliver Theory & Demo
- Participants have to execute the lab exercise on their laptops during training program
- Manuals will be provided for the installation of pre-requisites
- Please read the training requirements below for program format

List of Topics

Session	Module Name	Topic Name	Duration
Day 1			
Morning Session			
Session 1	Introduction to Secure Software Development Lifecycle	Need for Secure SDLC	30 min
Session 2		CIAAA Defence in Depth and Resiliency Cryptography and Security Metrics	45 min
Session 3	Secure Software Requirements	Define Security Requirements	45 mins
Afternoon Session			
Lab (Security Requirements)			2 hours

इलेक्ट्रॉनिकी एवं
सूचना प्रौद्योगिकी मंत्रालय
MINISTRY OF
ELECTRONICS AND
INFORMATION TECHNOLOGY
सत्यमेव जयते

CDAC

Day 2			
Morning Session			
Session 1	Secure Software Requirements	Data Classification and Data Privacy Requirements	1 hour 30 minutes
Session 2	Secure Software Requirements	Security Requirements Traceability Matrix	30 minutes
Afternoon Session			
Lab (Data Classification & SRTM)			2 hours
Day 3			
Morning Session			
Session 1	Secure Software Design Considerations and Principles	Secure Software Design Considerations Secure Software Architecture Principles Secure Software Design Principles	1 hour
Session 2		Threat Analysis and Attack Surface Evaluation Threat Modelling Methodologies	1 hour
Afternoon Session			
Lab (Threat Modelling)			2 hours
Day 4			
Morning Session			
Session 1	Secure Software Implementation	Secure Coding Guidelines Java	1 hour 15 minutes
Session 2	Secure Software Implementation	Secure Coding Guidelines Python	1 hour 15 minutes
Afternoon Session			
Lab (Software Composition Analysis)			2 hours
Day 5			

Morning Session			
Session 1	Secure Software Implementation	Secure Coding Guidelines C++	1 hour
Session 2		Secure Coding Guidelines JavaScript	1 hour
Afternoon Session			
Lab (Secure Implementation - JavaScript)			2 hours
Day 6			
Morning Session			
Session 1		Web Security Configuration	1 hour 30 minutes
Session 2		REST API Security	30 minutes
Afternoon Session			
Lab (Web Application Firewall (WAF))			2 hours
Day 7			
Morning Session			
Session 1		OWASP Top 10 Vulnerabilities	30 mins
Session 2		Docker Architecture Docker Commands	1 hour 30 mins
Afternoon Session			
Lab (Code Review (SAST&DAST) & Security Testing)			2 hours
Day 8			
Morning Session			
Session 1	Secure Software Implementation	Docker Swarm Network Building Docker Images Docker Security	2 hours
Afternoon Session			
Session 1	Operations & Maintenance	Continuous Integration/Continuous Deployment	30 minutes
Session 2		Secure Storage	30 minutes

Day 9			
Session 1	AI Security	An Overview & OWASP Top 10 LLM Application	2 hours

Training Requirements:

1. Participants should be well-versed in the SDLC lifecycle phases. Participants having a minimum of one year working experience in software development are preferred for nominations and having knowledge in the following programming languages HTML, JavaScript, and Python programming are desirable.

2. Participants may use their own laptop with Ubuntu 20.04 Operating System or install Virtual machine with Ubuntu 22.02 OS as guest OS for carrying out lab exercises during the training program.

3. During theory and demo sessions open-source software will be used to cover the session topics. In a few topics, demos will be given based on trial versions or subscription-based commercial software. Before the commencement of the training program, participants will be provided with an installation manual for prerequisites.

4. Access to the course material will be provided through online mode only for 3 months after attending the training program. Participants will be encouraged to participate in interactive sessions to clarify doubts after the training program.

5. Participants attending the training program and those who submit the lab assignments will be considered to have participated in the training program. Such participants will only be given a **Participation Certificate**.

6. Participants who have submitted lab assignments and a case study can opt for the certification examination on any day and at any time of their convenience by registering at https://forms.gle/CQ1twv6oXmGayAz89 5 days before the proposed examination date. For the certification examination, a separate fee of **Rs 1000/-** (including taxes) has to be paid during examination registration.

7. Certification fee has to be paid as per the particulars below -

Name of the Organization	Centre for Development of Advanced Computing(C-DAC)
Bank Name	Bank of India
Branch	Shamshabad, Hyderabad
Account Number	566310110004393
IFSC Code	BKID0005663

Supporting Partners

8. A certification examination would be conducted by CDAC Hyderabad and IIT Bhilai upon verifying the registration and payment particulars. The certification examination will be for 100 marks with MCQs, and the duration will be 90 minutes.

9. The participants who have appeared for the certification examination must attain a minimum of 65% (with 30% weightage for assignments and case studies, AND 70% weightage for the certification examination). Participants who fulfil the above criteria will be given a **Professional Certificate**.

For more details about the program format, please visit https://ssdlcp.in