Training on

Secure Software Development Lifecycle Practices Professional Certification Program

C-DAC, Hyderabad and IIT Bhilai

Conduction Mode : Online

Date : 28 June 2025 – 31 August 2025(Every Saturday)

Timings : 10:00 AM to 1:00 PM

Registration Link : https://forms.gle/QPKW4u17regCtQpz7

Instruction Details :

- The registration cost includes the fee for the Certification Examination
- 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			
Session 0	Introduction to Secure SDLC	Introduction Session	30 min
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	1 hour
Session 3	Secure Software Requirements	Define Security Requirements	1 hour
Day 2			
Session 1	Secure Software Requirements	Security Requirements - Lab	1 hour

Supporting Partners

Session 2		Data Classification and Data Privacy Requirements	1 hour 30 minutes
Session 3		Data Classification (Vault Demo & Lab)	30 minutes
Day 3			
Session 1	Secure Software Requirements	Security Requirements Traceability Matrix (SRTM)	30 minutes
Session 2		SRTM - Lab	1 hour
		Secure Software Design Considerations Secure Software Architecture Principles Secure Software Design Principles	1 hour 30 minutes
Day 4			
Session 1	Secure Software Design Considerations and Principles	Threat Analysis and Attack Surface Evaluation	1 hour
Session 2		Threat Modelling Methodologies (Theory & Lab)	2 hours
Day 5			
Session 1	Secure Software Design Considerations and Principles	Software Composition Analysis (Theory & Lab)	2 hours
Session 2		Secure Coding Guidelines C++	1 hour
Day 6			
Session 1	Secure Software Implementation	Secure Coding Guidelines Java	1 hour
Session 2		Secure Coding Guidelines Python	1 hour
Session 3		Secure Coding Guidelines JavaScript – Part 1	1 hour
Day 7			

Session 1	Secure Software Implementation	Secure Coding Guidelines JavaScript – Part 2	1 hour
Session 2		Web Security Configuration	1 hour 30 minutes
Session 3		REST API Security	30 minutes
Day 8			
Session 1	Secure Software Implementation	Web Application Firewall (WAF) – Theory & Lab	1 hour 30 minutes
		Code Review (SAST&DAST) & Security Testing – Theory & Lab	1 hour 30 minutes
Day 9			
Session 1	Secure Software Implementation	OWASP Top 10 Vulnerabilities	30 mins
Session 2		Docker Architecture Docker Commands Docker Swarm Network Building Docker Images	2 hours 30 minutes
Day 10			
Session 1	Security Testing	Docker Security - Theory & Lab	1 hour
Session 2	Operations & Maintenance	Continuous Integration/Continuous Deployment Tools	1 hour
Session 3		Secure Storage	1 hour
Day 11			
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 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. To get the Professional Certificate, participants have to submit lab assignments, a case study. After submitting the lab assignment and case study, they have to appear for the certification examination on any day and at any time of their convenience by registering at https://forms.gle/2wnrJTQ3snB5UXen8 , 5 days before the proposed examination date. For the certification examination, a separate fee of **Rs 1000/-** (including taxes) has to be paid during training registration.

6. 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

7. 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.

8. 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**.

9. The participants will be given a **Participation Certificate** after appearing for the examination in case they are unsuccessful in the certification examination.

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