Developing Secure Software (LFD121)

Learn the security basics to develop software that is hardened against attacks, and understand how you can reduce the damage and speed the response when a vulnerability is exploited. This course includes specific tips on how to use and develop open source and other software securely. It was developed by the Open Source Security Foundation (OpenSSF), a cross-industry collaboration that brings together leaders to improve the security of open source software by building a broader community, targeted initiatives, and best practices.

Duration: 3 Days

Prerequisites for this course

- We presume that the student already knows how to develop software to some degree.

Outline for this course

Chapter 1 – Introduction

Chapter 2 – Part 1: Requirements, Design and Reuse - Overview

Chapter 3 – Security Basics

Chapter 4 – Secure Design Principles

Chapter 5 – Reusing External Software

Chapter 6 – Part 2: Implementation - Overview

Chapter 7 – Input Validation

Chapter 8 – Processing Data Securely

Chapter 9 – Calling Other Programs

Chapter 10 – Sending Output

Chapter 11 – Part 3: Verification and More Specialized Topics

Chapter 12 – Verification

Chapter 13 – Threat Modeling

Chapter 14 – Cryptography

Chapter 15 – Other Topics