

ISACA Software Development Fundamentals (ITCA)

This entry-level ITCA - Software Development Fundamentals (ITCA-SDF) training prepares learners to recognize and navigate programming languages, grasp fundamental programming concepts and integrate them into the iterative process of software development. This ITCA exam prep will help you pass the software development portion of the ITCA certification, as well as give you hands-on practical opportunities to write and implement code.

[CBT Nuggets course material](#) →

WEEK 1

Learn to Use an IDE

153 min.

Install and Set Up VS Code	12
Understand What Open Source Really Means	9
Install Python	8
Work with Python Scripts	9
Importing Python Packages	11
CHALLENGE	3

Variables, Functions, and Data

Introducing Basic Programming Concepts	2
Variables	13
Built-In Functions	9
String Data	10
Numbers	6
Boolean	5
Lists	7
Dictionaries	7
Challenge	3

Creating Functional Code

Introducing Classes and Functions	1
Defining Class Properties	12
Defining Methods	8
Defining Functions (and Loops)	10
The If... Else Statement	8

WEEK 2

154 min.

CHALLENGE 4

Working with Bash

Introducing Linux and Bash 1

Create a Linux VM in Azure 8

Install Windows Subsystem for Linux 5

Navigating through Linux Folders 13

Perform CRUD Operations 8

Scripting with Bash 11

Working with Apt and Installing Applications 7

CHALLENGE 3

Synchronous and Async Code with JavaScript

Introducing Synchronous and Async Code 1

Understand Synchronous Execution 17

Understand Asynchronous Execution 9

Understand APIs 11

Fetch Data from an API 17

CHALLENGE 1

Work with Backend Datastores

Introducing Databases 1

Flat Files vs. Databases 14

Understand an RDBMS 12

Write Data to a CSV (Python) 11

Explore a Database Diagram 5

CHALLENGE 2

Understand SDLC and Project Management

Introducing the Software Development Lifecycle 1

Understand the SDLC 14

Waterfall vs Agile 11

Testing and Quality Assurance 14

The DevOps Lifecycle 8

CHALLENGE 5

WEEK 3

76 min.

Explore SQL Basics 16