

Digital Career Institute

Tooling



Goal of the Submodule

The goal of this submodule is to help the learners install and run Python 3, install VSCode and run Python code on their machines. By the end of this submodule, the learners should be able:

- install and run Python 3 locally
- understand IDEs
- download VSCode
- edit and run Python code on VSCode
- add plugins of VSCode

Topics

- Python installation
- IDE
- IDE Plugins

Term	Definition
IDE	Integrated Development Environment

Python 3 Installation

pyenv lets you easily switch between multiple versions of Python per user and per project.

Install pyenv

1. `brew install pyenv`



2. `echo 'eval "$(pyenv init -)"' >> ~/.bash_profile | ~/.zshrc`



3. `source ~/.bash_profile`

Install python

1. `pyenv list`



2. `pyenv install 3.9.0`



3. `pyenv global 3.9.0`

IDE-Integrated Development Environment

What is an IDE in Programming?

An IDE is:

- an application that facilitates application development.
- a piece of software that acts as a text editor, debugger, and compiler all in one.
- designed to make coding easier for developers and provides a central interface featuring tools like:



**a code
editor**



**a
compiler**



**a
debugger**

Code Editor

A code editor that's designed to help us write and edit our code. It also helps us make it more readable and clean.

Compiler

A compiler that transforms code written by a human into machine-readable form.

Debugger

A debugger that helps us eliminate errors from our programs so that our code executes and performs the way it should. This feature provides tools to help us examine our code.

multi-language IDEs

**Visual
Studio**

Intellij

Xcode

**Android
Studio**

Komodo

NetBeans

Eclipse

Features of Multi-lang IDEs

Intellisense

provide code completion, quick info, and member lists on a project.

Smart code editing

indent code lines, match words and brackets, and also highlight keywords.

Debugger

powerful debugging features and along with a graphical debugger and breakpoints. code written by a human into machine-readable form.

Extension/plugin manager

add new extensions/plugins to extend your IDE's functionality.

Version Control

offer support for various version control systems like Git, Subversion, Mercurial, CVS and so on.

1. Go to this [website](#)



2. Download for Mac OS X



3. Double-click on VSCode-osx. zip to expand the contents



4. Drag Visual Studio Code.app to the Applications folder, making it available in the Launchpad.



5. Add VS Code to your Dock by right-clicking on the icon and choosing Options, Keep in Dock.

Self Study



Topic:
VSCode Plugins

Documentation

- [Install brew](#)
- [Install Python with pyenv](#)
- [Install Python 3](#)
- [What is an IDE in Programming?](#)
- [Download VSCode](#)
- [Install VSCode on macOS](#)



THANK YOU

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