

# Design Patterns in Python

Learn via: **Classroom / Virtual Classroom / Online**

Duration: **1 Gün**

<https://bilginc.com/tr/egitim/design-patterns-in-python-3190-egitimi/>

## Overview

Katılımcılar tüm adımları doğrudan kendi bilgisayarlarında takip edebilir. Her bir ünitenin sonunda yeni öğrenilen bilgileri uygulamak için bolca imkan sunulan alıştırma bulunmektedir.

Her bir katılımcıya eğitimin içeriğinin yanı sıra tüm kaynak kodlarını ve kullanılan yazılımları da içeren kapsamlı bir PDF dosya verilmektedir.

## Prerequisites

Python konusunda temel bilgi sahibi olunması faydalı ancak zorunlu değildir.

## Who Should Attend

Individuals who want to design and build large-scale systems

## What You Will Learn

"It's Easier To Ask For Forgiveness Than Permission (Efap)"

One pythonic principle is "It's easier to ask for forgiveness than permission (EFAP)". Opposed to the approach to look before you leap, this principle states that you should first try an action and if it fails react appropriately. Python's strong exception handling supports this principle and helps to develop robust and fault tolerant programs.

### Meta Classes

Meta classes are an advanced topic of Python programming. Applying meta classes Complex tasks may be solved in an elegant manner. The use of meta classes is demonstrated with examples.

### Singelton

Singeltons are objects of which only one instance is supposed to exist. Python provides several ways to implement singeltons. These possibilities are shown using examples.

### Null Objects

Null objects can be used instead of the type None to avoid tests for None. Implementation, usage as well as advantages and disadvantages are covered.

### Proxy

Proxies stand for other objects. Setup and usage of proxies are covered.

### Observer

The observer pattern allows several objects to have access to the same data. The principles of this pattern are shown with a comprehensive example.

Parameters of constructors are often assigned to instance variables. This pattern can replace a many lines of manual assignment with only one line of code.

### **Outline**

#### Special Features Of Design Patterns In Python

In Python many problems can be solved more easily than in other languages. Therefore, several design patterns are not necessary or they are already implicitly contained in the languages.

The Principles of writing pythonic programs are explained and supported with examples. Topics such as beauty of source code, explicit programming, simplicity, readability, and exception handling are included.