



Python Programming Certification

Introduction

This certification is designed to learn the basics of python programming. Python is a general-purpose, dynamic, high level and interpreted programming language. It supports Object Oriented programming approach to develop applications. It is simple and easy to learn and provides lots of high-level data structures. By this certification, students will be able to develop complete web applications using python libraries and Django Framework. Python programmers are highly paid in IT industry and python applications are highly demanding on freelancing platforms. It is beneficial for students who have completed intermediate in computers and have basic programming skills.

Learning Outcomes

After the completion of this certification, students would be able to:

- Develop complete web application using python
- Work with Django Framework
- Python applications

Curriculum

| Week | Lecture | Topics |
|------|---------|--|
| 1 | 1 | Introduction to Python Programming |
| 2 | 2 | Installation of Python, Python Basics |
| 3 | 3 | Python Syntax, Variables, Operators, Datatypes |
| 4 | 4 | If-Else, Switch, Loops, Arrays, Functions |
| 5 | 5 | Python OOP and Classes |
| 6 | 6 | Python Built in and Lambda Functions |
| 7 | 7 | Python Libraries |
| 8 | 8 | Python Files I/O |
| 9 | 9 | Python Modules |

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| 10 | 10 | Python Exceptions |
|----|----|--|
| 11 | 11 | Mid Term Presentation |
| 12 | 12 | Python Regex, Sending Email |
| 13 | 13 | Python Asserts, Python Ide's |
| 14 | 14 | Web Scrapping Using Python, Mongodb |
| 15 | 15 | Python Math Module, OS Module and Statistics Module |
| 16 | 16 | Django Framework in Python |
| 17 | 17 | Django Setup, Django Interface |
| 18 | 18 | Django App and MVT, Django Model and View |
| 19 | 19 | Django Forms, Cookies, File Upload and Working With Database |
| 20 | 20 | Django Middleware and Django Exceptions |
| 21 | 21 | File Handling in Django, PDF and CSV Output |
| 22 | 22 | Django and Bootstrap |
| 23 | 23 | Final Project Presentations |
| 24 | 24 | T mar 1 Tojout 1 Tosonations |

Benefits of Certification

- To develop web applications using python
- Understanding of python programming
- Working with Django Framework

Entry Requirements

- Intermediate/O/A-level
- Basic Programming Skills
- Basic Computer Skills

Mode of Classes:

- Online
- On-campus

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