



Softcrayons

PYTHON CORE + ADVANCE

*Empowering minds
shaping futures*



PROFESSIONAL CERTIFICATION IN

PYTHON CORE + ADVANCE



PROSPECTUS



Key Advantages of Choosing Softcrayons

FOR STUDENTS

Supplemental Learning Resources: Softcrayons offers offline and online courses, educational materials, and additional resources that can complement and enhance college students' learning.

Skill Development: Softcrayons offer courses and certifications focused on developing specific skills that are in high demand in the job market.

Career Exploration: Softcrayons offer a wide range of courses across various disciplines, enabling college students to explore different fields and potential career paths.

Industry Relevance: Softcrayons frequently collaborates with industry professionals and experts to ensure that the knowledge and skills imparted are relevant and aligned with current industry practices and trends.

FOR FREELANCER & JOB SEEKER

Flexibility: Softcrayons offers online courses and programs that can be accessed from anywhere.

Skill Development: To acquire in-demand skills according to the latest industry trends and technologies to stay competitive in the job market.

Key Advantages of Choosing Softcrayons

Certifications: Softcrayons provides you with Professional Certifications and helps you with Resume Enhancement.

Career Support: Softcrayons also offers career counseling and job placement assistance, which can be invaluable for freelancers seeking new projects or job seekers looking for employment.

FOR ENTREPRENEURS AND BUSINESS OWNER

Upskilling and Reskilling: As the business landscape evolves rapidly, Softcrayons ensure that you stay up-to-date with the latest trends, technologies, and best practices.

Flexible Learning: Online courses offered by Softcrayons allow you to learn at your own pace, fitting your studies around your busy schedules.

Entrepreneurial Skills Development: Softcrayons offers courses and programs specifically designed to help entrepreneurs develop essential skills.

Cost-effective: Softcrayons provides more affordable learning options that help you invest in your professional development without straining your budget.

About The Program



Core Python refers to the fundamental elements of the Python programming language, encompassing basic syntax, data types, control structures, and built-in functions. It forms the foundation upon which more complex applications are built. Advanced Python extends beyond these basics, delving into topics such as object-oriented programming, functional programming, decorators, generators, threading, and more intricate libraries and frameworks. Mastery of advanced Python empowers developers to create scalable solutions, leverage Python's extensive ecosystem, and tackle complex problems with efficiency and elegance.

This syllabus covers a comprehensive range of topics in Python programming, from the basics of the language to more advanced concepts and applications.



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TRAINING CURRICULUM

1 Introduction to Python

- What is Python? History and features of the language
- Installing Python and setting up the development environment
- Basic Python syntax and structure
- Python data types: integers, floats, strings, booleans, etc.
- Variables and assignment

2 Python Operators and Expressions

- Arithmetic operators
- Comparison operators
- Logical operators
- Bitwise operators
- Operator precedence
- Type conversion and casting

3 Python Collections (Data Structures)

- Lists
- Tuples
- Dictionaries
- Sets
- List/dictionary/set comprehensions

4 Python Control Structures

- If-else statements
- Nested if-else

- Loops (for, while)
- Break and continue statements
- Match-case statements

5 Python Functions

- Defining and calling functions
- Function arguments and parameters
- Return statements
- Scope of variables
- Anonymous (lambda) functions
- Recursive functions

6 Python Exception Handling

- Syntax errors and exceptions
- try-except blocks
- Raising and handling custom exceptions
- Context managers

7 Python Modules and Packages

- Importing modules
- Creating and using custom modules
- Python standard library
- Third-party packages and libraries
- Virtual environments

8 Python File Handling

- Opening and closing files
- Reading from and writing to files
- File modes (text, binary)
- Handling file paths
- Directories and folders

9 Object-Oriented Programming in Python

- Classes and objects
- Attributes and methods
- Inheritance and polymorphism
- Encapsulation and information hiding
- Magic/dunder methods

10 Python Functional Programming

- Functional programming concepts
- Lambda functions
- Map, filter, and reduce
- Generators and generator expressions

11 Python Testing and Debugging

- Unit testing with unittest and pytest
- Test-driven development
- Debugging techniques and tools

12 Basic/Brief Introduction of these things

– PYTHON WEB DEVELOPMENT

- Introduction to web development
- Brief about Django and Flask frameworks

– PYTHON DATA ANALYSIS AND VISUALIZATION

- NumPy for numerical computing
- Pandas for data manipulation and analysis
- Matplotlib and Seaborn for data visualization

– PYTHON FOR DATA SCIENCE AND MACHINE LEARNING

- Scikit-learn for machine learning
- TensorFlow and PyTorch for deep learning

– PYTHON AUTOMATION AND SCRIPTING

- Scripting with Python
- Automating tasks and workflows
- Interacting with the operating system

Final Project: Students will work on various projects and a final Python project also be made that incorporating both core and advanced concepts learned throughout the course. This project will showcase their ability to use fundamental Python structures and object-oriented programming, as well as advanced features like decorators and generators.

This syllabus provides a structured approach to mastering Python, covering both core fundamentals and advanced applications. Upon completion, students will have the skills to develop complex Python applications, preparing them for roles such as Python Developer, Software Developer or Associate Software Engineer.

PLACEMENT COMPANIES



Testimonials of Students



Sukhpreet Kaur

2 reviews

★★★★★ 2 weeks ago **NEW**

Hlo mam I'm Sukhpreet your Softcrayons tarining institute in student my training is digital marketing course 😊 I'm very becoz I'm digital marketing beginner but my experience to much becoz my trainer is very intelligent and supportive and nature is very friendly 😊



Manish Malik

1 review

★★★★★ 2 weeks ago **NEW**

I'm new student in softcrayons my starting classes all gud my softcrayons experience to much better becoz my trainer is very experienced



Aman Bhardwaj

2 reviews

★★★★★ 5 months ago

I am Aman Bhardwaj, Recently I completed a Digital Marketing course from Softcrayons. After completing my course I got a placement at SNVA Ventures with a good salary package. If you want to do a course and boost your career in the Digital Marketing field. I will recommend you visit Softcrayons. If I talk about the environment and faculty then Softcrayons have a very good and friendly environment and their faculty is highly experienced in the Digital Marketing field. Specifically, Yashvant sir is one of the best trainer and they have great experience in the Digital Marketing field. Thank you Softcrayons and all staff who helped me boost my career in the Digital Marketing field.



Shivam Sharma

1 review

★★★★★ 2 months ago

I got the chance to study with the best teacher and they provided me a good career guidance. a veryb great place to learn programming and start your career.



Lalita Tiwari

1 review

★★★★★ 5 months ago

I hearded about softcrayons through friends and I enroll myself here, and done my course. I suggest you all to join softcrayons. Hope you do great.



Tanish Chandrawal

5 reviews

★★★★★ 5 months ago

It is good institute, practical oriented practice is very good. This institute is very useful for graduate students to make carrier in IT. 100% job guarantee is available for all students. Very good Institute for Cloud Computing like Azure, AWS, GCP.



Aman Vishwakarma

2 reviews

★★★★★ 2 months ago

Hie guys I'm aman softcrayons institute students for AutoCAD.. softcrayons institute is best training institute sarfaraz sir is best teacher for softcrayons. And best institute softcrayons



SOFT CRAYONS®



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