


Course Name	PYTHON PROGRAMMING - BEGINNER TO EXPERT	
About the Course	Python is a versatile and beginner-friendly language widely used in fields such as Software Development/Web development, Data Science, AI, and Automation. This course covers foundational concepts to advanced topics, guiding you from beginner to expert with practical projects for hands-on learning.	
Key Skills You Will Learn	Learn Python - the most popular programming language and for Data Science and Software Development, learn basics of Python Programming to Advanced concepts including Numpy, Pandas, Data Science, Data Analysis, Data Visualization using Python, Basics of Machine Learning	
Course Pre-Requisite	No pre-requisite	
Target Audience	Anyone who wants to be a Software Developer and/or wants to learn Python programming language and its application into Data Science, Data Analytics, Software Development, Data Engineering, AI, and DevOps as well as get into a number of Software Development job roles	
Job prospects with this role	Junior Python Developer, Python Developer, Python Software Developer, Back-end Python Developer, Python Senior Developer, Machine Learning Engineer	
Course Duration	~ 60 Hrs	
Course Customisation	Course customisation (as needed by the student) is possible. Pls. contact us for the customised course curriculum, duration and fees	
Certification	READYBELL Python Developer Certificate	
Mode of Training	Instructor-led 100% Online or 100% Classroom (Salt Lake, Kolkata - India) or hybrid mode (Online + Classroom) as suitable for the learner	
Course Fees	Please contact us	
Refund Policy	Get a 3-day free trial during which you can cancel at no penalty. After that, we don't give refunds	
Job Assistance	Mock Interviews (pertaining to the course) from Industry Leaders, Job leads with extensive interactions with Industry Leaders working in the course relevant field, Job Guidance, Techniques of resume preparation, Networking,	
Contact	READYBELL SOFTWARE SERVICES PVT. LIMITED AH 12, SALT LAKE SECTOR 2, KOLKATA (INDIA) - 700 091 E-MAIL: contact@readybellsoftware.com PH: +91 - 9147708045/9674552097, +91 - 33-79642872	

CURRICULUM		
Topic	Sub-Topic	Duration (Hrs)
PYTHON PROGRAMMING - BEGINNER TO EXPERT	Introduction to Python	60 Hrs
	What is Python?	
	Setting Up Python Environment	
	Python Basics	
	Syntax and Variables	
	Data Types	
	Basic I/O Operations	
	Operators	
	Control Structures	
	Conditionals	
	Loops	
	List Comprehensions	
	Data Structures	
	Lists	
	Tuples	
	Dictionaries	
	Sets	
	Functions and Modules	
	Defining Functions	
	Scope and Lambda Functions	
	Modules and Packages	
	File Handling	
	Reading and Writing Files	
	File Operations	
	Error Handling	
	Exceptions	

	Object-Oriented Programming (OOP)	
	Classes and Objects	
	Inheritance and Polymorphism	
	Encapsulation and Abstraction	
	Python Libraries	
	TensorFlow	
	Matplotlib	
	Peewee	
	Tkinter	
	Numpy	
	Pandas	
	Scikit-Learn	
	ORM (Object Relational Mapper)	
	Introduction to Object Relational Mapper	
	Writing Python code using ORMs instead of using SQL	
	Database Management	
	Introduction to Database Management	
	SQL Database	
	NoSQL Database	
	Way to interact with them using Python libraries	
	Advanced Topics	
	Decorators	
	Generators	
	Iterators	
	Context Managers	
	Regular Expressions	
	Multithreading and Multiprocessing	
	Working with APIs	
	Data Science Basics	
	Data Visualization	
	Implement basic machine learning algorithms with Scikit-Learn	

	Web frameworks	
	Flask - The micro web framework for Python	
	Django - The high-level framework	
	PROJECTS	
	Beginner Projects	
	Command-line calculator	
	To-do list app	
	Simple chatbot	
	Weather API integration	
	Basic web scraper	
	Intermediate Projects	
	Personal finance manager	
	Image processing and manipulation	
	Text-based adventure game	
	Web development project (blog, portfolio)	
	Data analysis and visualization project	
	Advanced Projects	
	Machine learning model deployment	
	Natural language processing project	
	Real-time data visualization dashboard	
	Web application with user authentication	
	Distributed computing project	
	Quiz/Assessments	
	Quiz/Assessments	
To register for this course please e-mail/call us		