Syllabus of the Capsule Course

Name of The Course: Introduction to Machine Learning using Python

Duration (in Hrs.): 10 HOURS

Fee (in Rs.): 472/-

Eligibility: Diploma/BCA/B.Tech/MCA or its Equivalent Course

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Course Content:

Day	Topic	Duration (in Min.)		
		Theory	**Practical**	**Total**
1	Machine Learning: Introduction and ML history	**60 min**	**60 Min**	**120 Min**
	What Is ML?			
	What is the Algorithm?			
	Types of Algorithm in ML?			
	Examples of the ML			
	Python Installation and Jupyter IDE installation			
	Introduction to OOP's			
	Python Data types, Control Structure and Functions			

Day 2	**Matplotlib**: Data Visualization with Python	**60 min**	**60 Min**	**120 Min**
	Installation of Matplotlib			
	Creating Static, interactive visualization like Bar Graph, Line Graph, Subplot, Scatter Plot, Histogram, Pie Chart, Plot Merging, etc.			

Day 3	Data Analysis and Exploration using Numpy and Pandas	60 min	60 Min	120 Min
	Installation of Numpy and Pandas			
	Data Manipulation using Numpy			
	Pre-processing of Machine Learning using Pandas			

Day 4	Regression Algorithm and Its Mathematical Model	60 min	60 Min	120 Min
	What is the Simple Linear Algorithm, Multiple Linear Algorithm and Polynomial Linear Algorithm			
	implementation of Regression Algorithm using Python			

Day 5	Decision Tree Algorithm and its implementation using Python	60 min	60 Min	120 Min
	Random Forest and its implementation using Python			
	Introduction to KNN and Logistic Regression			
	Doubt Clearing Session			