

# ML\_COURSE\_PATH

## Section 1:-

Lecture Topics	Video material	Reading Material
Core Python	<a href="#">Durga Sir Python</a> or <a href="#">Corey Schafer</a>	<a href="#">Durga Sir Python Notes</a> , Python Crash Course Book
Intermediate Python	<a href="#">Durga Sir Python</a> or <a href="#">Corey Schafer</a>	<a href="#">Durga Sir Python Notes</a> , Automation With Python Book
Advance Python	<a href="#">Durga Sir Python</a>	
Core Software Engineering Principle	NA	Robust Python & Design Patterns

## Section 2:-

Lecture Topics	Video material	Reading Material
Basic Mathematics ( Optional )	<a href="#">Algebra 1 &amp; Algebra 2</a>	<a href="#">Video Notes</a>
Linear Algebra	<a href="#">Linear algebra by Antern</a>	Linear Algebra for Dummies Book
Calculus	<a href="#">Calculus for ML by Antern</a>	Calculus for Dummies Book
Statistics and Probability	NA	Statistics Dummies Edition and Probability Dummies Edition

## Section 3:-

Lecture Topics	Video material	Reading Material
Introduction Machine Learning	<a href="#">Video 1</a> or <a href="#">Video 2</a>	<a href="#">Machine learning Wiki</a> and <a href="#">Introduction to statistical Learning</a> : Ch: 01 and <a href="#">Hands on ML with Scikit-Learn &amp; Tensorflow: Ch: 01</a>
Supervised Learning:- Linear Regression	<a href="#">Video 1</a> and <a href="#">Video 2</a> and <a href="#">Video 3</a>	<a href="#">CS229 LR Notes</a>

Beginner		
Regression Analysis and Statistics	<a href="#">Management - Applied Multivariate Statistical Modeling</a>	Applied Multivariate Statistical Analysis by Johnson and Wichern
Supervised Learning:- Logistic Regression	<a href="#">Video 1</a>	Introduction to statistical learning: Ch: 04 and Hands on ML book: Ch: 03 and <a href="#">Notes on Logistic Regression</a>
Generalized Linear Model	<a href="#">Video 1</a>	<a href="#">GLM's Wiki</a>
Regularization	NA	Introduction to statistical learning: Ch: 6 & Ch: 07
Naive Bayes	<a href="#">Video 1</a>	<a href="#">Naive Bayes Wiki</a>
Support Vector Machine	<a href="#">Video 1</a> and <a href="#">Video 2</a>	Introduction to statistical learning: Ch: 9
Bias-Variance Tradeoff	NA	<a href="#">Bias and Variance TradeOff</a> and <a href="#">Empirical risk minimization</a> and <a href="#">Precision-Recall Trade-Off</a>
Feature Engineering	<a href="#">Feature Engineering Krish Naik Playlist</a>	<a href="#">Feature Engineering for Machine Learning book</a>
Decision Trees and Ensemble Learning	<a href="#">Video 1</a> and <a href="#">Video 2</a> and <a href="#">Video 3</a> and <a href="#">Video 4</a> and <a href="#">Video 5</a> and <a href="#">Video 6</a>	Hands-On Ensemble Learning with Python Book
Unsupervised Learning	<a href="#">Video 1</a> and <a href="#">Video 2</a> and <a href="#">Video 3</a>	Hands-On Unsupervised Learning Using Python and Introduction to statistical learning: Ch: 10

#### Section 4:-

Lecture Topics	Video material	Reading Material
Machine Learning Operations	NA	<a href="#">MadewithML</a> , Designing Machine Learning Systems
End to End Production Grade Projects Examples	NA	<a href="#">ZenFiles</a>
Machine Learning Interview	NA	<a href="#">ML Interview</a> and Introduction to Machine Learning Interviews Book

