AI/ML RoadMap

1) Basic Math (Algebra, Probability and Statistics)

2) Python for Data Science (link)
   - the above link consists of python basics and basic libraries.

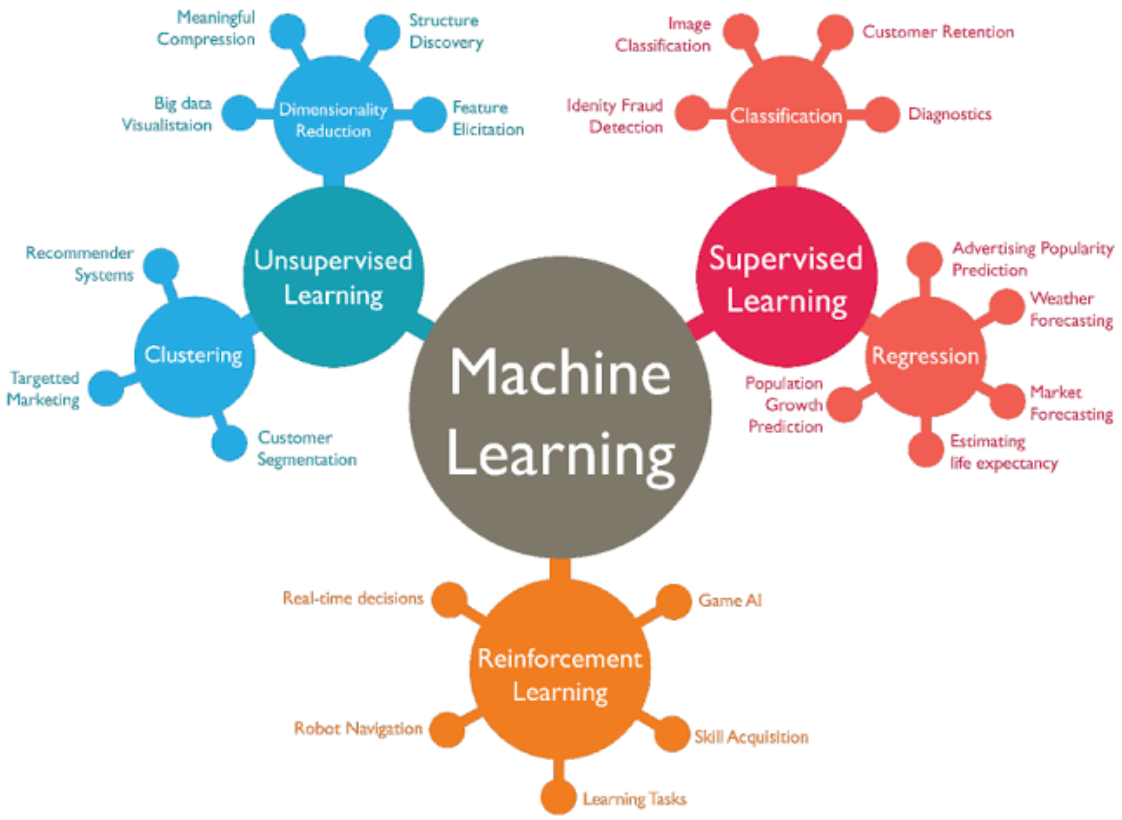
3) Probabilities and Statistics for Data Science (link)

4) For more libraries (link)

   - pandas, NumPy, matplotlib, SciPy, Scikit Learn, TensorFlow, PyTorch etc.

5) Types of Data in Python : Structure, Semi-Structure & Unstructured (link)

6) Types of Learnings : Supervised, Unsupervised & Reinforcement Learning (link)



(link)

7) Basic ML Models
   - Perceptron (link)
   - Gradient Decent and cost functions (link)
   - Classification Models (link)
   - Linear Regression, Multi Linear Regression, Logistic, K-Means Clustering, Decision Tree, Random Forest, KNN Algorithm (link) start from 23:38 to 4:54:47.
   - Dimensionality reduction: PCA and LDA (link)
   - Bagging and Boosting (link)
   - summary (link)

Beginners Guide for ML by GeeksforGeeks (link)

8) Basics of Deep Learning Models (link)

9) Concepts of Deep Learning: Neural Networks, CNN and RNN (link)

10) Generative AI (link)

11) Agentic AI [Latest of 2025]