

AI

Intelligent \rightarrow goal
to
Decision Achieved
 (at last)

Syllabus

- ① LOGIC \rightarrow
Propositional &
Predication logic
- ② Linear Algebra \rightarrow
Vector
Matrices
Determinant
Eigen vector
Eigen value

linear Independence of
vector,

Solving linear System of
Equations,

Orthogonalization;

SVD

Probability \rightarrow

RV, SS, Pmf, Pdf,
cdf, N, poision, ID

Statistics

MV Calculus :-

differentiation,

Max /

multiple interval.

linear Algebra;

Introduction to linear
Algebra by

Gilbert Strang

YT : MIT OCW

Probability and Statistics;

Probability & Statistics
for Scientists & Engineers

Sheldon M. Ross.

Logic;

Discrete Mathematics &
its Applications

by Tremblay
& Manohar.

Class test

CT 1

(10)

CT 2

(10)

Assignments (10)

4-5 problems from each
Section that is being
taught in the class

Python

Unit

3 - OOPS

4 - ML - libraries

5 →

Matplotlib lib

Networkx library

- Created by Guido van Rossum
in 1991, at Python 0.9.0

- Core Feature - exception handling
functions, and the
core data types (list, dict, str)

- Inspired by ABC (cwl) in Netherlands

- Inspired by Monty Python.

- is interpreted, interactive,
ODP.

- Python 1.0

↳ Features is
lambda
map
filter
reduce

Inspired by
functional
programming
language like Lisp

- Python 2.0 ↳ EDF Jan 2020

- Python 3.0 → 08

Not compatible with
Ex: print uses a ~~Statement~~ \Rightarrow
= Not a FUNCTION

- Maintained by Python Software Foundation (PSF), Non Profit membership organization

Found in 2000

F OSS

Community devoted to developing, improving, expanding, popularizing

- Powerful & versatile
- Availability of a Sizeable Standard Library and Several 3rd party packages via the Python Package Index accelerated Python's acceptance.
- Areas like Data Science, machine learning, web dev, and automation
- Numpy, Pandas, TensorFlow,

①

Time complexity
Sorting & Select
Searching &
Manipulation

Balancing
graph

