SAINTGITS
LEARN GROW EXCEL

SAINTGITS COLLEGE OF APPLIED SCIENCES

VALUE ADDED COURSES 2020—21

PYTHON AND MACHINE LEARNING

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ABOUT THE COURSE

python is the best language for machine learning. Software Solution developed with python can run on multiple operating system platforms.

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THE COURSE IS TO EQUP THE STUDENTS WITH LATEST TECHNOLOGY TRENDS IN

The course enables the students to get proficiently in Python programming language and they will get access to the latest information on AI.

OBJECTIVES

The objective of this course is:

- To impart theoretical and practical knowledge in the specialized area of Machine Learning.
- This course is designed to expose students to the frontiers of ML-intensive computing and information systems while providing a sufficiently strong foundation to encourage further research.

EXPECTED OUTCOMES

- Easily identifies trends and patterns
- No human intervention needed (automation)
- Handling multi-dimensional and multi-variety data

DURATION

30 Hrs.

SAINTGITS COLLEGE OF APPLIED SCIENCES ★ PATHAMUTTOM, KOTTAYAM ★

FEATURES

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Machine learning is a type of artificial intelligence that allows software applications to become more accurate at predicting outcomes without being explicitly programmed to do so. Machine learning algorithms use historical data as input to predict new output values.

RELEVANCE

This course is designed to equip the students with the latest machine learning features.

ADVANTAGES

- Machines help man to reduce his job.
- Machines reduce the time taken to do a job.
- Machines can do the job of more persons in less time.

CONTENTS

Module 1:

Introduction to python, Variables, List, Tuple & Set, Help Path, Installation of Python, Data types in Python, Operators in Python: Arithmetic, Logic, Relational, Bitwise Operators, Swap two numbers using Single line, Constants, Mapping & Dictionaries in Python

Module 2:

Import statements, Working with Pycharm, Input statements in Python using input box (), Control statements: Decision Statements: if, if...else, else...if.... ladder, Switch, Iteration: While and for loop, Break & Continue.

Module 3:

Arrays in Python, Declaration of Array as List in One Dimension and Two-Dimension Array, Functions in Python-With and Without arguments. Arrays: Read values from users, Recursion in Python, Create and Import Python Libraries.

Module 4:

Data Visualization using Pyplot: Line Chart, Pie Chart and Bar Chart. Data Structures in Python: Lists, Stacks and Queues. Create Simple Games: Use Pygame.

Module 5:

What is Machine Learning, Applications, steps in ML, Which Technologies are used? Major issues in Data Mining, Data Mining Stages, Selection of target data, Introduce Dataset sources, Need for data preprocessing, Major tasks in preprocessing, Data Cleaning Learning Methods, Supervised Learning, Unsupervised Learning (Data mining), Clustering

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Roll No	Name of Student	Month	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9
		Date	21	23	3	4	5	6	12	13	14	17	18	19	20	15	17	18	23	24	25
		Hour	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
1	ABHINAND K		x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	a	x	x
2	ABIN OOMMEN		a	x	a	x	x	x	x	x	a	x	x	x	x	x	x	a	x	x	x
3	ADHITHYA DEV		x	a	x	x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	x
4	AKHIL P ANIL		a	x	x	x	x	a	x	a	x	x	x	x	a	x	x	x	x	x	x
5	ALAN JOHN JOSEPH		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	ALEN JAMES		x	x	x	x	x	x	a	x	x	x	x	x	x	a	x	x	x	x	x
7	AMAL KRISHNAN		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
8	ANANTHALAKSHMI K S		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
9	ANSABA R B		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	ARCHANA KRISHAKUMAR		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
11	ARJUN.KB		x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a
12	ASHWIN S PILLAI		x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x
13	ATHUL BIJU ABRAHAM		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	AYANAA SHERIN A		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15	DEVIKA G		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
16	DEVIKA P S		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
17	FARZEEN FATHIMA FIROZ		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
18	FATHIMA RASHEED		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
19	GIBIN SKARIA PHILIP		x	x	a	x	x	x	a	x	x	x	a	x	x	x	x	x	a	x	x
20	GOKUL G		x	x	a	x	x	a	x	x	x	x	x	a	x	x	x	x	a	x	x
21	HARITHAMOL K H		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
22	IBINU THAYIB		x	a	x	x	a	x	x	x	x	x	a	x	x	x	a	a	x	x	x
23	JACOB VARGHESE		x	x	a	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x
24	JAYAKRISHNA S		x	x	x	a	x	x	a	x	x	x	x	a	x	x	x	a	x	x	x
25	JAYALAKSHMI M		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
26	JEFFY PRAMOD PHILIP		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
27	JESWIN JAMES		x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
28	JEWEL GEORGE		x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	a	x	x	x
29	JEWEL JOSE		x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x
30	JEWEL TIJU THOMAS		x	x	a	x	x	x	x	x	x	x	a	x	x	x	x	a	x	x	x

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1	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2	a	x	x	x	x	a	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x
3	a	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	a	x	x	x	x	a	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x
5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
7	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
8	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
11	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
12	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
13	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
16	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
18	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
19	x	x	a	x	x	x	x	a	x	x	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x
20	x	x	a	x	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x
21	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
22	x	x	x	x	a	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x
23	x	a	x	x	x	a	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x
24	x	a	x	x	x	x	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x
25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
26	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
27	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
28	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
29	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
30	x	a	x	x	x	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x

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		Hour	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
31	JILU ELSA JACOB		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
32	JISHONE SAJI		x	x	a	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	
33	JITHU VARGHESE JACOB		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
34	JOBEL JOHN JAMES		x	x	x	x	x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	
35	KAMAL NATH		x	a	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	a	x	
36	KARTHIK J		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
37	KEERTHANA RISHI		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
38	KEVIN SHAJI GOMEZ		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
39	KIRAN SIMON SAGI		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
40	M S RAVISHANKAR		x	a	x	x	x	x	x	a	x	x	x	x	a	x	x	x	x	a	x	
41	MANJIMA SREE		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
42	MEGHANA RAJ		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
43	MERLIN MATHEW		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
44	MIDHULESH MURALI		x	a	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	
45	MOHAMMED BILAL P.S		x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	a	x	x	
46	MOHASINA MOHAMMED ALI		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
47	NAVYA ANN JACOB		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
48	NEHA SEIRAH BIJU		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
49	NIKHIL JACOB KURIAN		x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x
50	NITHIN MATHEW		x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x
51	P S SAM		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
52	PRATIBHA ANN JAYESH		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
53	RAISA ANN VESSLY		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
54	REVATHY P		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
55	ROHAN JOSEPH		x	x	a	x	x	x	x	x	x	x	x	a	x	x	x	x	x	a	x	x
56	ROSHAN THOMAS		x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
57	SACHIN C VARUGHESE		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
58	SANJAY SAJI		x	x	x	x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x
59	SHIJU KOSHY VARGHESE		x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
60	SONY ABRAHAM		a	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x

Roll No	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11
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32	x	x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x
33	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
34	x	x	a	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x
35	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x
36	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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39	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
40	x	x	x	x	x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x
41	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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44	x	a	x	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	a	x	x	x	x
45	x	x	x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x
46	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
47	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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55	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
56	x	x	x	a		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
57	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
58	x	x	a	x	x	x	x	x	a	x	x	x	x	a	x	x	x	x	a	x	x	x	x	x	x
59	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
60	x	x	a	x	x	x		a	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x

61	SOYAL ABRAHAM MATHEW		X	X	X	a	X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	61	X	X	a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
62	SRUTHY SURESH		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	62	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
63	SYAM VARGHESE MATHEW		a	X	X	X	X	X	X	X	X	a	X	X	X	X	a	X	X	X	X	X	63	X	a	X	X	X	X	X	X	a	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X
64	TINU VARGHESE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	64	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
65	VASUDEVAN NAMPOOTHIRI		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	65	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
66	VEENA VINOD		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	66	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
67	VIJAY C. H		X	X	X	X	X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	67	X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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