SAINTGITS

SAINTGITS COLLEGE OF APPLIED SCIENCES

VALUE ADDED COURSES 2021—22

INTERNET OF THINGS

SAINTGITS COLLEGE OF APPLIED SCIENCES
PATHAMUTTOM, KOTTAYAM

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ABOUT THE COURSE

An Introduction to Internet and things enables the participants to understand the basic IoT architecture It also includes the protocols and applications of IoT

THE COURSE IS TO EQUP THE STUDENTS WITH LATEST TECHNOLOGY TRENDS IN INTERNET OF THINGS

OBJECTIVES

- The learner will understand key terms and concepts in IoT
- Understand the protocols and working
- Understand the applications and challenges of IoT

E XPECTED OUTCOI'IES

Students will be able to define the various concepts of IoT, architecture and working, and to list different echnologies and protocols in IoT

DURATION

0 Hrs

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FEATURES

We provide practical sessions for this course

RELEVANCE

This course is designed to equip the students with the IoT concepts.

ADVANTAGES

Internet of Things is a technology where physical devices are interconnected to each other and are given a set of commands to be executed. Students by enrolling in this course will be able to know the architecture of IoT.

CONTENTS

Module-1: IoT Introduction –

Definition, Features, Advantages, Disadvantages, standard devices, Sensors- Different types, various forms of sensor data, Introduction to Big Data and cloud Computing.

Module-2: IoT Architecture and working –

IOT hardware – sensors, wearable electronics and standard devices. Software – data collection, integration, real time analysis

Module-3: IoT Technology and Protocols –

RFID, NFC, low-energy Bluetooth, low-energy wireless, low-energy radio protocols, LTE-A, and Wi-Fi-Direct.

Module-4: IoT Applications, Challenges and Security Issues –

Government, Healthcare, Industry, Environmental Monitoring, Transportation, Smart Home, Smart Grid.

Security Issues- Privacy, Authentication, Hardware, Software.

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PATHAMUTTOM, KOTTAYAM

Internet of Things

Course Code:VCIOT013

Course objective: The learner will understand key terms and concepts in IoT, IoT sensors and its applications.

Module-1: IoT Introduction –

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Module-2: IoT Architecture and working -

IOT hardware – sensors, wearable electronics and standard devices. Software – data collection, integration, real time analysis

Module-3: IoT Technology and Protocols –

RFID, NFC, low-energy Bluetooth, low-energy wireless, low-energy radio protocols, LTE-A, and Wi-Fi-Direct.

Module-4: IoT Applications, Challenges and Security Issues -

Government, Healthcare, Industry, Environmental Monitoring, Transportation, Smart Home, Smart Grid.

Security Issues- Privacy, Authentication, Hardware, Software.

References:

1. Title - Designing the Internet of Things
Author - Adrian McEwen & Hakim Cassimally
Publishers - John Wiley and Sons Ltd
2. Title - INTERNET OF THINGS, A Hands-On Approach
Author - Arshdeep Bahga and Vijay Madisetti
Publisher - Arshdeep Bahga and Vijay Madisetti

Roll No	Name of Student	Month																				Roll No										
		Date	31	1	3	4	16	17	17	18	22	22	23	24	24	25	3	3	4	8	10	15		3	4	4	4	4	4	4	4	4	4
		Hour	6	6	6	6	6	3	6	6	6	6	3	6	6	3	6	6	6	3	6			17	7	7	8	9	9	9	9	11	11
																								3	5	6	6	1	2	3	4	5	1	2
1	ABHINAND K		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X	X	X	X	X	X	X
2	ABIN OOMMEN		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X	X	X	X	X	X	X
3	ADHITHYA DEV		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	X	X	a	X	X	X	X	X	X	X	X
4	AKHIL P ANIL		X	X	X	X	A	A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	X	X	X	X	X	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	X	5	X	X	X	X	X	X	X	X	X	a	X
6	ALEN JAMES		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
7	AMAL KRISHNAN		X	X	X	X	X	A	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
8	ANANTHALAKSHMI K S		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
9	ANSABA R B		X	X	X	X	X	X	X	X	X	a	X	X	X	a	X	X	X	X	X	X	9	X	X	X	X	X	X	X	X	X	X	X
10	ARCHANA KRISHNAKUMAR		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	a	X	X	X	X
11	ARJUN KB		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
12	ASHWIN S PILLAI		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12	X	X	X	X	X	X	X	A	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	X	13	X	X	a	X	X	X	X	X	X	X	X
14	AYANVA SHERIN A		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
15	DEVIKA G		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
16	DEVIKA P S		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
17	FARZEEN FATHIMA FIROZ		X	X	X	X	X	A	X	X	X	X	a	X	X	X	X	X	X	X	X	X	17	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	X	18	X	X	X	a	X	X	X	X	X	X	X
19	GIBIN SKARIA PHILIP		X	X	A	X	X	A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	19	X	X	X	X	X	X	X	X	X	X	X
20	GOKUL G		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	20	X	X	X	X	X	X	X	X	X	X	X
21	HARITHAMOL K N		X	X	X	X	X	A	X	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
22	IBINU THAYIB		X	X	X	A	X	X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	22	X	X	X	X	X	X	X	X	X	X	X
23	JACOB VARGHESE		X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X	X	X	X	23	X	X	X	X	X	X	X	a	X	X	X
24	JAYAKRISHNA G		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	24	X	X	X	X	X	X	X	X	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	X	25	X	X	a	X	X	X	X	X	X	X	X
26	JEFFY PRAMOD PHILIP		a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	26	a	a	a	a	a	a	a	a	a	a	a
27	JESWIN JAMES		X	X	X	X	X	A	X	X	X	X	X	a	X	X	X	a	X	X	X	X	27	X	X	X	X	X	X	X	X	X	X	X
28	JEWEL GEORGE		X	X	X	X	X	A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	28	X	X	a	X	X	X	X	X	X	X	X
29	JEWEL JOSE		X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X	X	X	29	X	X	X	X	X	X	X	a	X	X	X
30	JEWEL TINU THOMAS		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	30	X	X	a	X	X	X	X	X	X	X	X

Roll No	Name of Student	Month	1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	Roll No	3	4	4	4	4	4	4	4	4	4	4
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31	JILU ELSA JACOB		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	31	X	X	a	X	X	X	X	X	X	X	X
32	JISHONE SAJI		X	X	X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	32	X	X	X	X	X	X	X	X	X	a	X
33	JITHU VARGHESE JACOB		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33	X	X	X	X	a	X	X	X	X	X	X
34	JOBEL JOHN JAMES		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	34	X	X	X	X	X	X	X	X	X	X	X
35	KAMAL NATH		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	a	X	X	X	35	X	X	a	X	X	X	X	X	X	X	X
36	KARTHIK J		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	36	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	X	37	X	X	X	X	X	X	X	X	a	X	X
38	KEVIN SHAJI GOMEZ		X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X	X	38	X	X	X	X	a	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	X	39	X	X	X	X	X	X	X	X	X	X	X
40	M S RAVISHANKAR		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	a	X	X	X	40	X	X	X	X	X	X	X	X	X	X	X
41	MANJIMA SREE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	41	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	X	42	X	a	X	X	X	X	X	X	a	X	X
43	MERLIN MATHEW		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	43	X	X	X	X	X	a	X	X	X	X	X
44	MIDHULESH MURALI		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	44	X	X	X	X	X	X	X	X	X	X	X
45	MOHAMMED BILAL P.S		X	X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X	X	45	X	X	X	X	X	X	X	X	X	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	46	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	47	X	X	X	X	X	X	X	X	a	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	48	X	a	X	X	a	X	X	X	X	X	X
49	NIKHIL JACOB KURIAN		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	49	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	a	X	X	X	X	a	X	X	X	50	X	X	X	X	X	X	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	51	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	52	X	X	a	X	X	X	X	X	X	X	X
53	RAISA ANN VESSLY		X	X	X	X	X	X	X	X	X	a	X	X	X	X	a	X	X	X	X	X	53	X	X	X	X	X	X	X	X	a	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	54	X	X	X	X	X	X	X	X	X	X	X
55	ROHAN JOSEPH		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	55	X	X	X	X	X	X	X	X	X	X	X
56	ROSHAN THOMAS		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	56	X	X	X	X	X	X	X	X	X	X	a
57	SACHIN C VARUGHESE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	a	X	X	X	X	57	X	X	X	a	X	X	X	X	X	X	X
58	SANJAY SAJI		X	X	X	X	X	X	X	X	a	X	X	X	X	X	X	X	X	X	X	X	58	X	a	X	X	X	X	X	X	X	X	X
59	SHIJU KOSHY VARGHESE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	a	X	X	59	X	X	X	X	X	a	X	X	X	X	X
60	SONY ABRAHAM		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60	X	X	X	X	X	X	X	X	X	X	X

61	SOYAL ABRAHAM MATHEW		61
62	SRUTHY SURESH		62
63	SYAM VARGHESE MATHEW		63
64	TINU VARGHESE		64
65	VASUDEVAN NAMPOOTHIRI		65
66	VEENA VINOD		66
67	VIJAY C. H		67
68	SAVANTH SAJI		68