



SAINTGITS COLLEGE OF APPLIED SCIENCES

VALUE ADDED COURSES 2021—22

INTERNET OF THINGS



PRINCIPAL
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam-686 532, Kerala

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.



SAINTGITS
LEARN.GROW.EXCEL

OBJECTIVES

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

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

EXPECTED OUTCOMES

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

DURATION

30 Hrs.



[Signature]
PRINCIPAL
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam-686 532, Kerala

FEATURES



SAINTGITS
LEARN GROW EXCEL

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

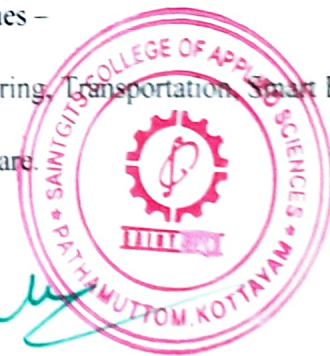
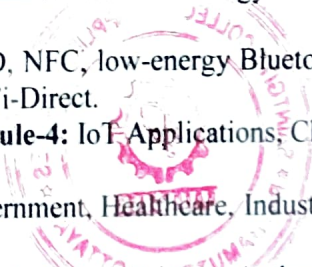
Module-3: IoT Technology and Protocols –

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.



[Signature]
PRINCIPAL
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam-686 532, Kerala



SAINTGITS
LEARN.GROW.EXCEL



A handwritten signature in green ink, likely belonging to the Principal, is written across the bottom right of the page.

PRINCIPAL
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam-686 532, Kerala

SAINTGITS COLLEGE OF APPLIED SCIENCES

Pathamuttom, Kottayam - 686532
Phone : 0481 - 2433787
e-mail : scas@saintgits.org, Web : www.saintgits.org

LEARN . GROW . EXCEL



SAINTGITS
EARN.GROW.EXCEL

SAINTGITS COLLEGE OF APPLIED SCIENCES 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 –

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.

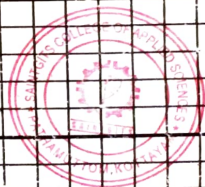
References:

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

PRINCIPAL
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam-686 532, Kerala



Roll No	Name of Student	Month	Date												Roll No	
		1	2	3	4	5	6	7	8	9	10	11	12			
		1	2	3	4	5	6	7	8	9	10	11	12			
		Hour	6	6	6	6	3	6	6	6	3	6	6	6	9	6
31	JILU ELSA JACOB		X	X	X	X	X	X	X	X	X	X	X	X	X	X
32	JISHONE SAJI		X	X	X	X	X	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
34	JOBEL JOHN JAMES		X	X	X	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
36	KARTHIK J		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
38	KEVIN SHAJI GOMEZ		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
40	M S RAVISHANKAR		X	X	X	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
42	MEGHANA RAJ		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
44	MIDHULESH MURALI		X	X	X	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	X	X	X	X	X
46	MOHASINA MOHAMMED ALI		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
48	NEHA SEIRAH BIJU		X	X	X	X	X	X	X	X	X	X	X	X	X	X
49	NIKHIL JACOB KURIAN		X	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
51	P S SAM		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
53	RAISA ANN VESSLY		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
55	ROHAN JOSEPH		X	X	X	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
57	SACHIN C VARJGHESE		X	X	X	X	X	X	X	X	X	X	X	X	X	X
58	SANJAY SAJI		X	X	X	X	X	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
60	SONY ABRAHAM		X	X	X	X	X	X	X	X	X	X	X	X	X	X



Abhishek

Om

51	SOYAL ABRAHAM MA. HEW		X	X	X	X	X	H	X	X	X	X	X	X	X	X	X	X	X	X	61	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	62	X	X	X	X	X	X	X	X	X	X	X
63	SYAM VARGHESE MATHEW		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	63	X	X	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	64	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	65	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	66	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	X	X	X	X	X	X	67	X	X	X	X	X	X	X	X	X	X	X
68	SAVANTH SAJI		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	68	X	X	X	X	X	X	X	X	X	X	X

Shree



Om