



SAINTGITS
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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

