



Institute for Development and Research in Banking Technology

(Established by Reserve Bank of India)

Castle Hills, Road No. 1, Masab Tank, Hyderabad-57, India.

e-Programme on

FUNDAMENTALS OF INTERNET OF THINGS (IOT) AND APPLICATIONS

October 13 - 16, 2020

Introduction

After significant technological developments in Computing, Communication, Networking, Mobility and Sensing, the world is now moving towards smart city, smart banking and smart financial services. Banks and Financial Institutions are looking at how the regular gadgets, wearable devices and embedded objects used by the customer, banking touch points and monitoring devices can be made intelligent to aid in faster and seamless decision making in the form of Internet of Things (IoT). Wireless Sensor Networks and IoT Networks are emerging as convenient solutions for access, feedback and regular use from anywhere and anytime. In this programme, the basics of IoT, Sensor Networks, Wearable devices, access points, wireless communication technologies and standards would be discussed. The application of IoT in smart banking, smart branch, smart data centre etc., would be discussed. How the BFSI can prepare for implementation and management of IoT Networks would be presented. The associated risks, challenges, IoT security, APIs for IoT based financial services would be analysed.

Objectives

- To learn the fundamentals and developments of the Internet of Things (IoT)
- To understand the benefits, challenges, risks, applications and strategies to leverage IoT as a means for smart banking and financial services.

Contents

- IoT : Basics, Applications, Standards and Smart Banking
- Sensors, Embedded Systems, Wearable Devices, Internet Technologies
- Wireless Communication and Wireless Sensor Networks
 - Wi-Fi, BT, NFC, BLE, IR, Beacons
 - BAN, PAN, LAN, 5G
- IoT based Smart Financial Services, Mobile Banking and Payments
- IoT Challenges – Privacy, Big data, Energy Optimization, Mobility, APIs, User Interfaces, Multi-lingual and location based services
- IoT Security and Light Weight Cryptography
- Case study

Mode of Teaching

Online teaching plus learning inputs through reading material, videos, webinars, assignments, quizzes, online interactions and clarifications. Each e-Programme will have four live webinars and course material will be made available in advance for study.

Who Can Participate?

Officers handling any of the digital services, mobile banking, social media, internet banking, emerging technologies, computer networks, automation technologies, IT, IT enabled services, innovation technologies etc., can attend.

End Use:

- Learning fundamentals and recent developments in IoT would help one to look for innovative solutions in respective organizations and integrate with backend networks.
- Banks planning for IoT based automation services in Branch offices, Main offices, Datacentre, ATM booths, Kiosk Centres etc., can understand the process of doing so.
- Awareness on IoT Security, Risks and Sensor Networks can help to use the data generated effectively and provide tech savvy solutions to customers.

Programme Coordinator:

Dr. V. N. Sastry, Professor, IDRBT; e-mail: vnsastry@idrbt.ac.in

Fees:

For Indian Participants

- RRBs & Coop Banks: Rs. 8,850/- (Rs. 7,500/- + 18% GST)
- All Other Banks & FI's: Rs. 11,800/- (Rs. 10,000/- + 18% GST)

For International participants

- US \$ 175 (per participant, All inclusive)

Bank Account Details for Remittance of Fees

The fees for this e-programme can be remitted to the following accounts:

For Indian Participants

Account Name : IDRBT
Bank & Branch : Axis Bank Limited, Humayun Nagar, Mehdiapatnam, Hyderabad
Account No. : 426010100018823
MICR Code : 500211012
IFSC Code : UTIB0000426

For International participants

Receiver's Correspondent Bank : JP Morgan Chase, New York, USA
Swift Code : CHASUS33XXX
Fed Wire Routing Number : ABA 021000021
Beneficiary Bank & Branch : Axis Bank Ltd., Mumbai, India
Account Number : 0011407376
Beneficiary Bank Swift Code : AXISINBB

Ultimate Beneficiary

Account Name : IDRBT
Customer ID : 030021632
Account No. : 426010100018823
Bank & Branch : Axis Bank Ltd., Jubilee Hills, Hyderabad, India. (AXISINBB030)

Nominations

Banks may nominate any number of participants to these e-Programmes, which may be accepted on a first-cum-first-served basis. While nominating, please provide the details of the participants (Name, Designation, Bank, Mobile No/Phone No, email address, fees billing address, GST No. of the Bank.)

Apart from nominations by banks, staff members of banks can self-nominate themselves for these e-Programmes by providing their employee credentials and paying the programme fee latest by **October 10, 2020**.

How to Register

The nominations for these e-Programmes, and queries if any, may please be sent to eprogram@idrbt.ac.in. Please visit <https://www.idrbt.ac.in/eprogrammes> for more details about these programmes.

e-Programmes in October 2020

S. No.	Name of the e-Programme	e-Programme Date	e-Programme Coordinator	Last Date for Nomination
1	Proactive Cyber Defence Strategies	Oct 05 - 08, 2020	Dr. Dipanjan Roy	Oct 03, 2020
2	API Security and Governance	Oct 05 - 08, 2020	Dr. V. Radha	Oct 03, 2020
3	Emerging Technologies for Banking	Oct 06 - 09, 2020	Dr. Rajarshi Pal	Oct 03, 2020
4	AI/ML and Data Science in Banking	Oct 12 – 15, 2020	Dr. V. Ravi	Oct 10, 2020
5	Data Science in Banking and Finance	Oct 12 – 15, 2020	Dr. Mridula Verma	Oct 10, 2020
6	Fundamentals of Internet of Things (IoT) and Applications	Oct 13 – 16, 2020	Dr. V. N. Sastry	Oct 10, 2020
7	Threats to Digital Payment Ecosystem	Oct 19 – 22, 2020	Dr. Susmita Mandal	Oct 17, 2020
8	Introduction to Technologies for Doorstep Banking	Oct 19 – 22, 2020	Dr. M. V. N. K. Prasad	Oct 17, 2020
9	Fundamentals of Wi-Fi Security	Oct 19 – 22, 2020	Dr. N. P. Dhavale	Oct 17, 2020
10	Targeted Attacks – Detecting in early stages	Oct 26 – 29, 2020	Dr. B. M. Mehtre	Oct 24, 2020
11	Introduction to Security in Cloud Computing	Oct 26 – 29, 2020	Dr. P. Syam Kumar	Oct 24, 2020