



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

API SECURITY AND GOVERNANCE

February 28 – March 03, 2022

Introduction

APIs bring new business opportunities to banks. Opening APIs without proper assessment of risk control measures can open the banks business to a world full of opportunities to commit serious cyber-crimes.

Objective

This programme is aimed at educating the audience about, why and how the APIs are developed; the kind of threats APIs open; How to manage the security of API; What kind of governance to practice; What kind of risk control measures to be adopted etc.

Contents

- Types of API
- Sample API Development
- API Security
- SSL
- Introduction to PKI
- API Management
- API Risk and Governance
- API Lifecycle
- API Authentication and Access Control

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?

Developers, Inspection officials as well as officers in IT function involved in design, deployment and maintenance of information systems

End Use:

The participants will understand the security threats and risks that arise by opening APIs. They learn how to manage the API and take risk control measures.

Programme Coordinator:

Dr. V. Radha, Associate Professor, IDRBT; e-mail: vradha@idrbt.ac.in

Fees:

For Indian Participants

- RRBs & Coop Banks: Rs. 11,800/- (Rs. 10,000/- + 18% GST)
- All Other Banks & Financial Institutions: Rs. 14,750/- (Rs. 12,500/- + 18% GST)

For International participants

- US \$ 220 (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 **February 25, 2022**.

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 February 2022

| S. No. | Name of the e-Programme | Date | e-Programme Coordinator | Last Date for Nomination |
|--------|--|-----------------|--------------------------|--------------------------|
| 1 | Threats to Digital Payment Ecosystem | 01 – 04 | Dr. Susmita Mandal | Jan 31, 2022 |
| 2 | Distributed Ledger Technology and Banking Applications | 07 – 10 | Dr. N. V. Narendra Kumar | Feb 04, 2022 |
| 3 | IT Project Management | 08 – 11 | Dr. Abhishek Thakur | Feb 07, 2022 |
| 4 | Technologies for Financial Inclusion | 08 – 11 | Dr. M. V. N. K. Prasad | Feb 07, 2022 |
| 5 | Video Analytics in Banking & Finance | 14 – 17 | Dr. Mridula Verma | Feb 11, 2022 |
| 6 | Malware Analysis | 15 – 18 | Dr. Rajarshi Pal | Feb 04, 2022 |
| 7 | Dark Web Monitoring for Threat Intelligence | 15 – 18 | Dr. B. M. Mehtre | Feb 14, 2022 |
| 8 | RBI Guidelines on Cyber Security | 21 – 24 | Dr. Dipanjan Roy | Feb 18, 2022 |
| 9 | Virtualization and Cloud Computing | 22 – 25 | Dr. P. Syam Kumar | Feb 21, 2022 |
| 10 | API Security and Governance | Feb 28 – Mar 03 | Dr. Abhishek Thakur | Dec 27, 2021 |

e-Programmes in March 2022

| S. No. | Name of the e-Programme | Date | e-Programme Coordinator | Last Date for Nomination |
|--------|--|---------|--|--------------------------|
| 1 | Workshop on Registration Authority Operations | 01 – 04 | Dr. N. P. Dhavale | Feb 28, 2022 |
| 2 | AI/ML and Data Science for Banks | 01 – 04 | Dr. V. Ravi | Feb 28, 2022 |
| 3 | Proactive Cyber Defence Strategies | 07 – 10 | Dr. Dipanjan Roy | Mar 04, 2022 |
| 4 | Introduction to Authentication Techniques | 08 – 11 | Dr. M. V. N. K. Prasad & Dr. N. P. Dhavale | Mar 07, 2022 |
| 5 | Recent Cyber Crimes and Defences | 08 – 11 | Dr. Rajarshi Pal | Mar 07, 2022 |
| 6 | Data Centre Management | 14 – 17 | Dr. P. Syam Kumar | Mar 11, 2022 |
| 7 | Emerging AI/ML Technologies | 14 – 17 | Dr. Mridula Verma | Mar 11, 2022 |
| 8 | Big Data Analytics through Elastic Map Reducer for Banks | 21 – 24 | Dr. V. Ravi | Mar 11, 2022 |
| 9 | Mobile Banking, Social Media Banking and Mobile Security Testing | 21 – 25 | Dr. V. N. Sastry | Mar 18, 2022 |
| 10 | Targeted Attacks - Detecting in Early Stages | 22 – 25 | Dr. B. M. Mehtre | Mar 21, 2022 |
| 11 | Secure Coding Practices | 22 – 25 | Dr. V. Radha | Mar 21, 2022 |
| 12 | Re-envisioning Digital Banking Systems | 28 – 31 | Dr. Susmita Mandal | Mar 25, 2022 |

e-Programmes in April 2022

| S. No. | Name of the e-Programme | Date | e-Programme Coordinator | Last Date for Nomination |
|--------|--|---------|--------------------------|--------------------------|
| 1 | Distributed Ledger Technology and Banking Applications | 04 – 07 | Dr. N. V. Narendra Kumar | Apr 01, 2022 |
| 2 | Technologies for Financial Inclusion | 04 – 07 | Dr. M.V.N.K. Prasad | Apr 01, 2022 |
| 3 | Workshop on Registration Authority Operations | 05 – 08 | Dr. N. P. Dhavale | Apr 04, 2022 |
| 4 | AI/ML for Cyber Security | 05 – 08 | Dr. Rajarshi Pal | Apr 04, 2022 |
| 5 | Adversarial ML for Banks | 18 – 21 | Dr. V. Ravi | Apr 13, 2022 |
| 6 | Smart Banking using AI and ML | 18 – 21 | Dr. Mridula Verma | Apr 13, 2022 |
| 7 | Cyber Forensics for Cyber Defence - A Proactive Approach | 19 – 22 | Dr. B. M. Mehtre | Apr 18, 2022 |
| 8 | API Development | 19 – 22 | Dr. V. Radha | Apr 18, 2022 |
| 9 | Future of Innovative Smart Banking | 25 – 28 | Dr. Susmita Mandal | Apr 22, 2022 |
| 10 | Security in Cloud Computing | 26 – 29 | Dr. P. Syam Kumar | Apr 25, 2022 |
| 11 | Introduction to Hardware Security | 26 – 29 | Dr. Dipanjan Roy | Apr 25, 2022 |

e-Programmes in May 2022

| S. No. | Name of the e-Programme | Date | e-Programme Coordinator | Last Date for Nomination |
|--------|---|---------|--|--------------------------|
| 1 | Re-imagining customer engagement with conversational Chatbots | 09 – 12 | Dr. Mridula Verma | May 06, 2022 |
| 2 | Introduction to Governance, Risks and Compliance | 10 – 13 | Dr. Abhishek Kumar Thakur | May 09, 2022 |
| 3 | Continuous Security Validation | 10 – 13 | Dr. V. Radha | May 09, 2022 |
| 4 | Secure Financial Infrastructure | 10 – 13 | Dr. Susmita Mandal | May 09, 2022 |
| 5 | Cyber Security for Remote Working Scenario | 17 – 20 | Dr. Rajarshi Pal | May 16, 2022 |
| 6 | Proactive Cyber Defence Strategies | 17 – 20 | Dr. Dipanjan Roy | May 16, 2022 |
| 7 | Dark Web Monitoring for Threat Intelligence | 17 – 20 | Dr. B. M. Mehtre | May 16, 2022 |
| 8 | Introduction to Authentication Techniques | 23 – 26 | Dr. M.V.N.K. Prasad Dr. N.P.Dhavale | May 20, 2022 |
| 9 | Explainable AI for Banks | 24 – 27 | Dr. V. Ravi | May 23, 2022 |
| 10 | Big Data and Cloud | 24 – 27 | Dr. P. Syam Kumar | May 23, 2022 |

e-Programmes in June 2022

| S. No. | Name of the e-Programme | Date | e-Programme Coordinator | Last Date for Nomination |
|---------------|--|-----------------|--------------------------------|---------------------------------|
| 1 | Privacy Preserving Machine Learning for Banks | 06 – 09 | Dr. V. Ravi | June 03, 2022 |
| 2 | Distributed Ledger Technology and Banking Applications | 06 – 09 | Dr. N. V. Narendra Kumar | June 03, 2022 |
| 3 | 5G Use Cases and IoT Applications for Banks | 06 – 10 | Dr. V. N. Sastry | June 03, 2022 |
| 4 | Threats to Digital Payment Ecosystem | 07 – 10 | Dr. Susmita Mandal | June 06, 2022 |
| 5 | Technologies for Financial Inclusion | 07 – 10 | Dr. M.V.N.K. Prasad | June 06, 2022 |
| 6 | Emerging AI/ML Technologies | 13 – 16 | Dr. Mridula Verma | June 10, 2022 |
| 7 | Workshop on Registration Authority Operations | 14 – 17 | Dr. N. P. Dhavale | June 13, 2022 |
| 8 | Privacy and Security Risks in Machine Learning | 14 – 17 | Dr. Rajarshi Pal | June 13, 2022 |
| 9 | RBI Guidelines on Cyber Security | 20 – 23 | Dr. Dipanjan Roy | June 17, 2022 |
| 10 | Introduction to Containers | 21 – 24 | Dr. P. Syam Kumar | June 20, 2022 |
| 11 | Targeted Attacks - Detecting in Early Stages | 21 – 24 | Dr. B. M. Mehtre | June 20, 2022 |
| 12 | API Development | Jun 28 – Jul 01 | Dr. V. Radha | June 27, 2022 |