

**FREE!**

# Government Officials Training in Internet of Things (GOT-Basic)



इलेक्ट्रॉनिकी एवं  
सूचना प्रौद्योगिकी मंत्रालय  
MINISTRY OF  
**ELECTRONICS AND  
INFORMATION TECHNOLOGY**

**futureskills<sup>®</sup>**  
**prime**  
A MeitY - NASSCOM Digital Skilling Initiative

FUNDAMENTAL LEVEL TRAINING TO GOVERNMENT OFFICIALS ON INTERNET OF THINGS (IOT)  
BLENDED LEARNING UNDER FUTURE SKILLS PRIME, AN INITIATIVE OF MINISTRY OF ELECTRONICS AND  
INFORMATION TECHNOLOGY, NIELIT CHENNAI-CO-LEAD CENTRE IN INTERNET OF THINGS

## COURSE OBJECTIVE

To Provide an understanding of Internet of Things and its applications in various domains to the Government Officials. The course also details the technical insights to the Government officials involved in planning and RFP preparation.

## TARGET AUDIENCE

Employees/Faculty/Professionals working with State/Central Govt. including PSUs/Autonomous bodies/Research organisations/Govt Departments/Govt Colleges/Govt Universities

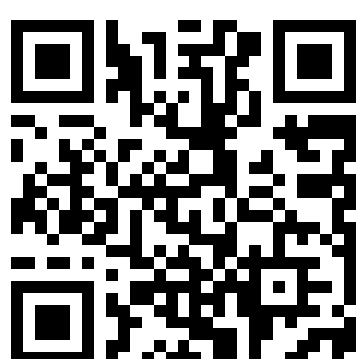
## CERTIFICATE

Course completion certification will be issued to participants with minimum 80% attendance and minimum passing mark in final quiz

## IMPORTANT DETAILS

Course Name: Government Officials Training (GOT) - Basic on Internet of Things  
Duration: 40 hours / 5 days  
Mode of training: Virtual Instructor-Led Training (VILT) Online mode  
Examination: LMS based Quiz  
Scorecard: Scorecard will be issued to participants with minimum 50% score in LMS Quiz

Scan QR for applying



## COURSE SYLLABUS

**Module-1:** Fundamentals of IoT: Government department specific case study: problem statement, Introduction to IoT, Sensors, Actuators, Reference Architecture of IoT, Challenges in IoT, Use Case demonstration of IoT Systems for smart cities etc.

**Module-2:** Introduction to Microprocessors and Microcontrollers: Introduction to MCU Families - Overview of ARM Cortex-M architecture, CMSIS standard, Introduction to MCU based platforms, Peripherals, Serial protocols - UART, SPI, I2C; ADC & DAC

**Module-3:** Sensors & Actuators required for various IoT applications: Sensors and actuators for different IoT use cases, selecting sensors and actuators considering field limitations, Sensor calibration and maintenance issues

**Module-4:** Wireless Technologies: TCP/IP Model- WLAN, IEEE 802.15.4 Wireless PAN standard - ZigBee/6LoWPAN, Bluetooth/BLE Basics, Cellular Technologies, Short range communications, Wireless Low Power Wide Area networks and GPS.

**Module-5:** Edge Computing and Protocols: Communication Models, Data Exchange Formats, MQTT Protocol, RESTful Architecture, HTTP REST Model, CoAP Protocol, IoT security, Gateway Design & Characteristics, Principles of Edge Computing and IoT platforms & IoT in Machine Learning Applications

**Module-6:** IoT Application Demos

## ONLINE REGISTRATION

>> Interested participants can register by following link

<https://www.nielitchennai.edu.in/fsp/>

>> This is a MeitY sponsored program. There is no registration fee as well as Training fee.

>> Only limited seats are available. Registrations shall be made on "first come, first served" basis.

## CONTACT DETAILS

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