



Online | 6 Weeks



# Anudaksh

## Training cum Internship Program In IoT and Cloud

By IIT Guwahati, RFRF & The IoT Academy

# ABOUT

## IIT GUWAHATI



Indian Institute of Technology Guwahati, the sixth member of the IIT fraternity, was established in 1994. The academic programme of IIT Guwahati commenced in 1995. At present the Institute has eleven departments and three inter-disciplinary academic centres covering all the major engineering, science and humanities disciplines, offering BTech, BDes, MA, MDes, MTech, MSc and PhD programmes. Within a short period of time, IIT Guwahati has been able to build up world class infrastructure and a reputation for itself.

# ABOUT

## Research for Resurgence Foundation (RFRF)

RFRF has been planned & designed through aspiration of true-researchers, academicians and policy makers. This foresighted movement has solution oriented approach for ultimate goals of achieving human– ecosystem balance. RFRF has signed MoU with 128+ higher education institutes and universities





# ABOUT

## The IoT Academy



### OUR MISSION

The IoT Academy insists on academia and industrial collaboration. “The IoT Academy” can help you to complete your projects, POC and provide needed support in training to acquire skills. We emphasize hands-on training and experiments. This provides the learner an edge to prepare better for job and interviews. For training purposes we have developed experimental boards in-house. Our collaborations with various industries help us to keep our knowledge up to date that translates into our training courses and to develop edge over other training Institutes.

### OUR VISION

At The IoT Academy We believe that the future is about Unified and Converged technologies as reflected in our vision statement. Every aspect of life will eventually lead in bringing forth a unified world of immense possibilities.



The IoT Academy is our Training & Development unit which was set in December 2017 to enable us to prepare Skilled engineers as per Industrial Demand. The IoT Academy has made a niche name for itself and has provided training to more than 1000+ trainees so far from various discipline, sectors, places both on campus and at our institute.

The IoT Academy is a reputed ed-tech platform that offers training and courses in emerging technologies such as the Internet of Things, Embedded Systems, Machine Learning, and Edge AI. We aim to focus on cutting-edge technical education and enterprises that would contribute new contributions to society.



# ABOUT Anudaksh

## ANUDAKSH

(Anusandhan, Niyojaniyata,  
Udyamita, and Dakshta),  
an Initiative to  
upskill Students, Faculty Members,  
and Working Professionals

## OUR MISSION

- Train 50 Lakhs students in 05 years  
in various domains, such as VLSI,  
Computer  
Science, Data Science, IoT, Bio-  
informatics, Artificial Intelligence,  
Machine Learning,  
Blockchain, Digital Marketing etc. in  
minimum 500 universities nationwide  
Upskilling towards employability by  
Gyan Setu  
Skill development towards  
entrepreneurship by Kaarya Setu  
Boosting research base in India by  
Shodh Setu



# Anudaksh

## Program Benefits

- ✓ **Certificate of Completion from IIT Guwahati, RFRF and The IoT Academy.**
- ✓ **Internship Certificate** From UniConverge Technologies.
- ✓ **Live Instructor-led Classes.**
- ✓ **Exposure to Industrial Based Project.**
- ✓ **Doubt Clearing Sessions.**
- ✓ **Career Guidance and Placement Support.**
- ✓ **Intensive Learning Experience.**
- ✓ **Industrial Visit.**

**Skill India**



**Self-Reliance**

# PROGRAM CURRICULUM: LEARNING PATH

Master Industry-relevant skills for new age **IoT and Cloud** through the most relevant curriculum designed by **IIT Guwahati, RFRF & The IoT Academy** leaders from the industry.

## Introduction to IoT and Architecture

Module

01

What is IoT, IoT applications in different domains, Trends in IoT Market, Smart things Gateways, Middleware, Edge vs Cloud functional partitioning

## NODEMCU(Esp8266)

Module

02

Install IDE Software, Introduction to NODEMCU(Esp8266), Pinout of NODEMCU, Programming Of NODEMCU, Weather monitoring solution, Automatic street lights

## IoT Protocols

Module

03

HTTP/REST, MQTT, COAP, AMQP, WEBSOCKETS, 6LoWPAN

## Node-RED

Module

04

Installation of Nodejs, Installation of Node-Red, Node-Red Dashboard, Local broker installation, Connection between local broker and Node-RED

## IOT Security

Module

05

Introduction to mbed TLS and SSL, Importance of IoT application, AES encryption

## IOT cloud services

Module

06

IoT Cloud Architecture, Services-SAAS-PAAS-IAAS, Things peak Cloud, Google Firebase

## Cloud Computing

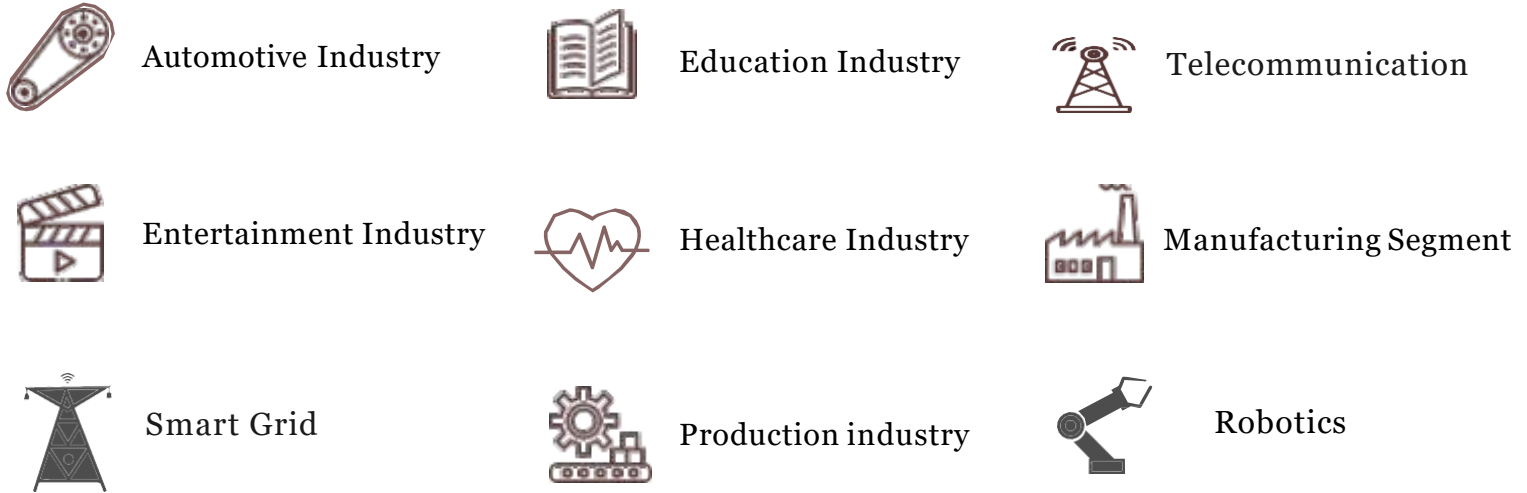
Module

07

Cloud Computing, Benefits of Cloud, Deployment Models,AWS-IOT Core/ SageMaker and Greengrass  
Google IOT Cloud, Thingspeak, IBM Bluemix

# 2 WEEKS PROJECTS

The projects and assignments will help you accumulate real-world experience in different industries.





# 2 WEEKS PROJECTS

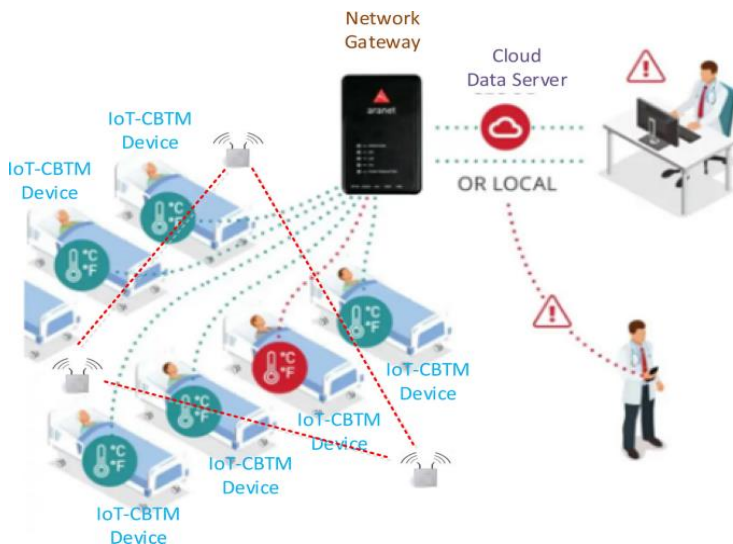
Industry projects will be a part of your Certification Program in **IoT & Cloud** to consolidate your learning. Industry projects will ensure you have the real world experience to start your career in **IoT & Cloud**.

- Essential Tools
- Designed by Industry Experts
- Get Real world Experience

## IOT BASED CONTACTLESS BODY TEMPERATURE MONITORING SYSTEM

The person who monitors the temperature of the people need to spend more time and it also takes more effort. So, in order to avoid this time-consuming process, we have an IOT based temperature monitoring and data collection system. In today's world, the Internet of Things is revolutionizing our life by developing a number of systems which can be monitor temperature remotely.

**Hardware Tools you will be using:** : Raspberry PI, MLX90614 Sensor, Raspberry PI Camera

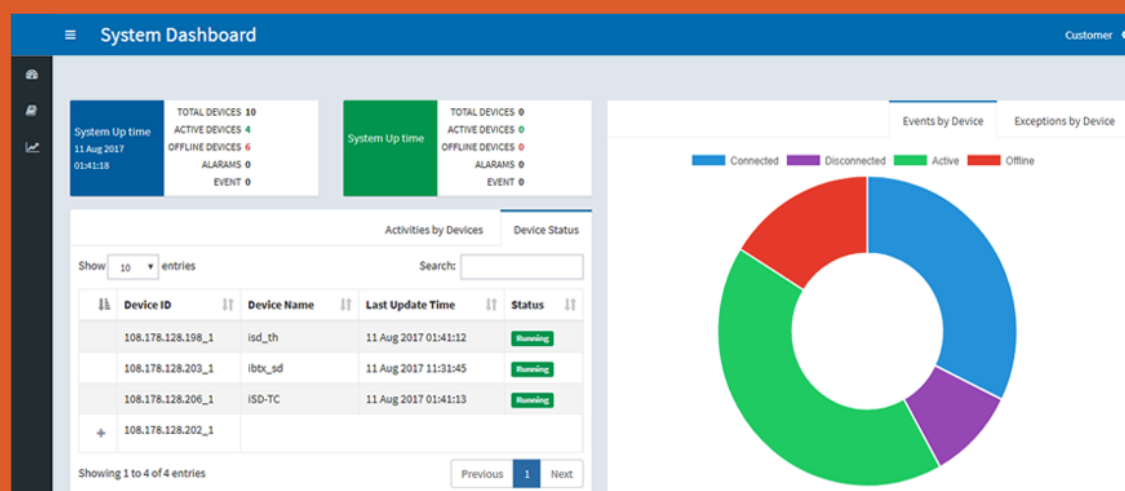


## IOT FLOW BASED DASHBOARD

An IoT dashboard is the user interface within an IoT platform that enables users to monitor and interact with connected devices through graphs, charts and other tools and UI elements. It allows users to manage every aspect of their all-connected devices as well as gain perspective on environment through visualization of his device data.

**Hardware Tools you will be using:**

Nodemcu, DHT11, Node-RED





## TRAINING & INTERNSHIP CERTIFICATION

Upon successfully completing this program, you'll earn **Training cum internship program in IoT & Cloud** that is co-branded by **IIT Guwahati, RFRF & The IoT Academy** as the Knowledge Partner. This certificate will testify to your skills as an expert in **IoT & Cloud**

### Training Certificate



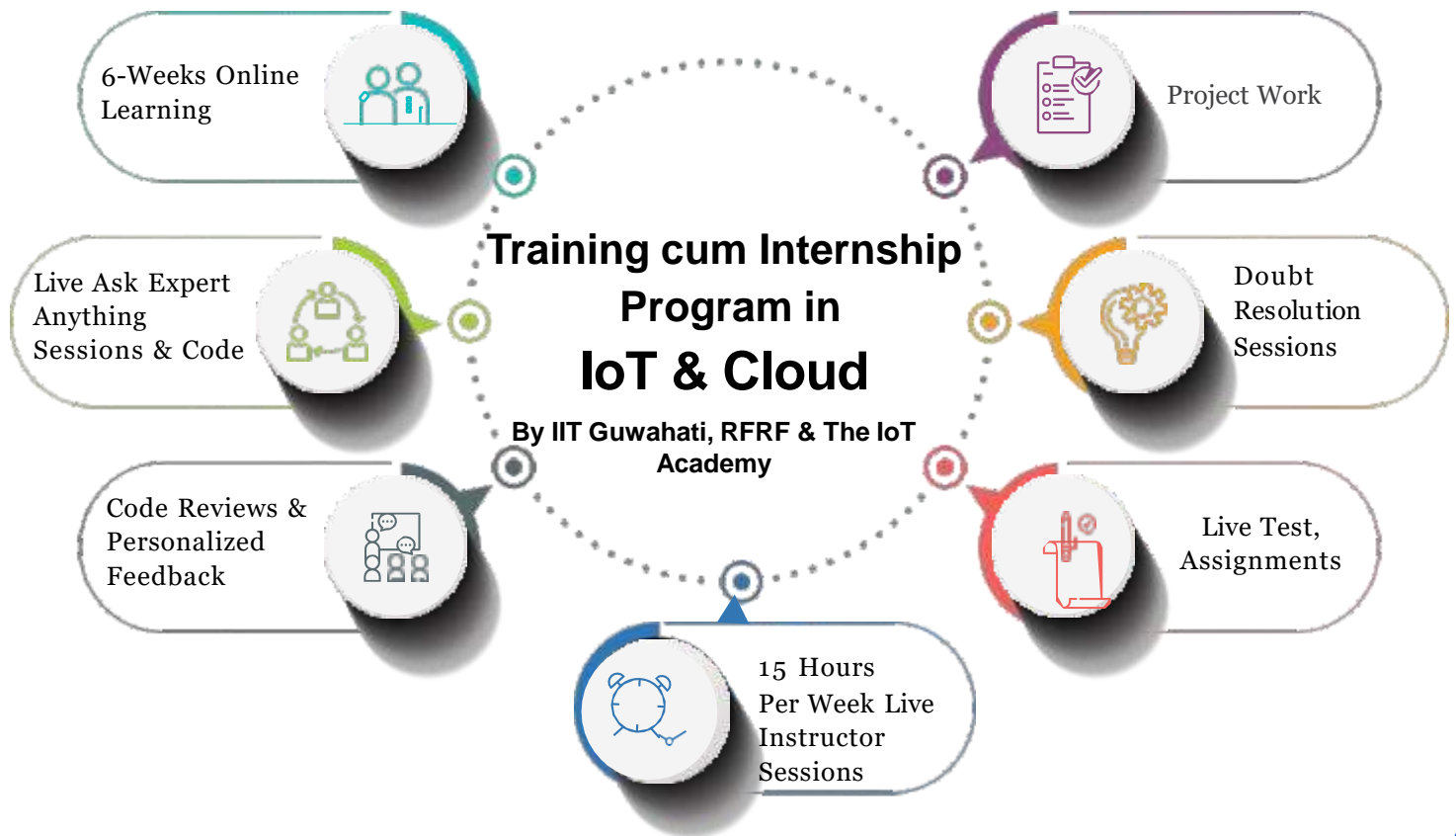
### Internship Certificate





# PROGRAM PEDAGOGY

Learn from one of the best faculty in India through live online sessions. While Academic Professors will help you learn **IoT & Cloud** industry experts will impart practical knowledge of **IoT & Cloud** techniques through real-world projects.



## Benefits for Trainees

- ✓ Curriculum designed by leading industry experts and faculties
- ✓ Certification by IIT Guwahati IIT Guwahati
- ✓ Guest Lectures by IIT Faculties
- ✓ Completely Hands-on based Learning mentored by Industry Veterans
- ✓ Industry Oriented skill sets
- ✓ Industry Grade Capstone Projects
- ✓ Job assistance/guidance through Industry Partners
- ✓ Workshops on Entrepreneurship and Business Ecosystem

## CONTACT DETAILS



## Program Information:

Anudaksh

Training cum Internship Program In IoT & Cloud

By IIT Guwahati, RFRF & The IoT Academy



### Connect Us



+91 8882770248



+91-9354068856

### Email

anudaksh@theiotacademy.co

### Follow us on:



[www.anudaksh.com](http://www.anudaksh.com)



[www.iitg.ac.in](http://www.iitg.ac.in)



[www.rfrfoundation.org](http://www.rfrfoundation.org)



[www.theiotacademy.co](http://www.theiotacademy.co)