

FAQ's [Frequently Asked Questions]

What will be the final outcome of this training?

At the end of the training you will be able to implement yourself almost 90% IoT applications which are mainly sensor based or RFID [based](#) irrespective of IOT End to end Gateway or IoT cloud platform dependency.

Some of the major IoT applications which you will be [running](#) finally:

- Smart home and Smart Agriculture system which can be interacted through your android/laptop or any other devices remotely
- Smart switches which can control any Appliances [Refrigerator,A.C.,Oven, Washing machine, Fan, Lights, Door etc] to turn ON/OFF (Advance switches) through your android/laptop or any other devices remotely
- Smart Hospitals and car parking system that will notify on your android app where exactly car has to be parked and [Click here](#) to see many more.

Why should I join this training?

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Internet of Things or IOT has become one giant buzz word in this era. With its popularity and increasing Demand in Automotive, Agriculture, Medicals or Wearable etc. Industries and Institutes are spending huge amount of money and time in smart products and Research to know this key technology from the core but in today's era its very difficult for individual or organization to get the right content and practical demonstration or visualization about IOT [complete End to end architecture] because it is still in developing phase.

By keeping these points in mind, Hi-Tron had designed its 3 major Industry level End to end IoT training modules in which participants will be having Deep understanding of:

Latest IoT technologies and standards – Analog/Digital Sensors, CAN BUS, MOD BUS, I2C, SPI Protocol, Raspberry-Pi, Arduino, Ethernet shield, ESP8266-12E, IoT Gateways, WSN Technology, Protocols, Bluetooth Low Energy, Zigbee, RFID, IPV4/IPv6, MQTT/HTTP/COAP, IPV6LOWPAN, Wireless Communication, Web-sockets, Cloud, Nodejs, MongoDB, Expressjs, Angularjs, REST services, and much more.

What if i go with online Internship mode? How the session will be conducted ? will the session be as interactive as offline?

- (1) We will be delivering the training using latest GOTO Meeting or Google hangout screen share and VOIP.
- (2) All session will be very interactive with participants either typing in their questions or simply asking them directly over VOIP throughout sessions.
- (3) We will ship you the required hardware kit. We will ensure that you get the kit before the session dates. Entire Kit Cost including Shipping/handling included in training cost.
- (4) We will be sending you the softcopy of the practical manuals and sample code etc. which will help you complete the practicals.
- (5) Manuals have been built in a very user friendly manner using lots of images and video etc. to help complete the practical easily and with clarity.
- (6) McKEN experts will be present during the all sessions to guide and help you understand theory and complete the practicals.
- (7) McKEN experts will showcase the practicals through screenshare and demo all aspects for clear understanding.

How much effective offline training will be?

In offline Mode you will be assigned individual workstation at McKEN for Hands on experience and you will be getting complete hardware kit for Training from McKEN Workshop.

What are the pre-requisites for the Training?

There are no specific pre-req. McKEN has built the deck and tutorials/Practicals in a simple and easy way so that anyone can learn from them. During the training our experts will help you understand all aspects. Lots of Finance, HR senior executives have attended our sessions with amazing results.

What Benefits i will get?

1. Build your own IOT Device and get IOT Certified.
2. Understanding End to End IOT Architecture and its Complete Business.
3. Sensors and Embedded Systems.
4. Hardware & Software Development Platform for IOT
5. All networking protocols for IOT with respect to OSI model(to connect devices).
6. Amazon IOT Cloud Plstform,IBM Bluemix, Thingspeak overview.
7. Practical for all above mention topics.
8. Get your hands dirty with hardware and create your own IOT Devices
9. Understand the concept behind smart cities, smart wearable's &smart switches.
10. Well Trained Faculties from MckEN.

100% hands on experience in building circuit designing as well as programming.

Who can join this Training?

Students: Who are looking to build a better career in technology, There is going to be a 4.5 million job vacancies for IOT specialize because 90% top level companies (Apple, IBm, google, Microsoft, Cisco, Qualcomm) are making their product smart or have started working in this domain.

Electronics/ECE/E&TC/ExTC engineers: Who are aware that a golden period is coming for them soon and want to reach out beyond their current scope that limits them to just electronics or communication. . Even in many universities IOT course got compulsory for students' academics so those who are planning for higher education MS or MBA, this training can be a fruitful for them.

Existing or Budding Entrepreneurs: Nowadays in every country 7 out of 10 startups are in IOT Domain. So those who have any IoT ideas (e.g. Remote controlled things, home automation, wearable tech devices, etc.) that they would like to bring to a reality. They will get a very good understanding of all technologies and most importantly, how these technologies work together to make it possible. They will also get technical support from MckEN experts.

Industry professionals: Working in pharmaceutical, real estate, manufacturing, electrical, retail, healthcare and a number of other verticals and businesses who are foresighted to see the disruption that it will bring in the way their business operates in the near future and want to be the early adopters or change agents in their respective industries. Through the insight that they

build on the working and the possibilities of IoT, they can spearhead the adoption of it in their business areas.

What if i miss the class?

You will never lose any lecture. You can choose either of the two options: 1. View the recorded session . 2. You can attend the missed session, in any other live batch.

I am from IT or non-technical background. Will I be able to work with Hardware?

Yes, primarily McKEN is hardware base company and our course content are designed in such a way that you will be working with open source (readymade) Embedded Hardware devices which are the best IoT solution for quick start and you will be getting almost all the embedded source code and 24×7 large community support.

What Exactly is the Internet of Things?

The Internet of Things (IoT) is the next wave, [world](#) is going to witness. Today we live in an era of connected devices (mobile phones, computers etc.), the future is of connected things (Things mean: home appliances, vehicles, lamp-posts, personal accessories, your pets, industrial equipment's and everything which you use in day-to-day life). Internet of Things is a term given to the attempt of connecting objects to the internet and also to each other – allowing people and objects themselves to analyze data from various sources in real-time and take necessary actions in an intelligent fashion.

Many big technology industries like apple, Intel, ARM, Google, IBM, and Microsoft have welcomed IoT and are putting huge investments and R&D efforts in this domain. Cisco's Internet Business Solutions Group (IBSG) predicts some 25 billion devices will be connected by 2015, and 50 billion by 2020 and the market size, as predicted by GE is 10-20 trillion USD. The Internet of Things is the next revolution for users and brands.

Why would i learn IOT now?

The Internet of Things isn't coming soon. It's already here. Big players are entering the game. Google bought the Nest Thermostat, Apple is coming out with Home Kit, ARM and Intel have both released new developer tools, Relayer got \$2.3M in funding from Cisco to build an Internet of Things App ecosystem and Samsung announced earlier this year that they want to connect 90% of their devices by the end of 2017.

Few more facts :-

- 1) 4.5 Million Jobs to be generated for IOT's trained professionals in top companies by 2016.
- 2) 90% of top level companies (Apple, Samsung, IBM, google, Qualcomm) products will be IOT based by 2017.
- 3) Our country is moving towards the 'Smart City'. We want to contribute in the "Make in India" campaign of our Prime Minister Shri Narendra Modi ji.
- 4) Government of India has allocated 7,060 Crore for 100 new smart cities in Budget 2015-16.
- 5) Opportunities in India for smart cities, smart home, smart parking, smart hospitals, smart vehicles, smart gardens in the mentioned budget.

What will be there in IOT (Internet of things) Kit?

- 1) Raspberry- Pi 2 model B
- 2) 4 GB Samsung SD card
- 3) Arduino UNO (Atmega 328) Board.
- 4) Arduino Ethernet Shield (W5100)
- 5) Wi-fi module (Esp8266E-12Version).
- 6) Ultrasonic sensor (HCSR04).
- 7) Temperature sensor (LM35).
- 8) Luminescence Sensor (LDR).
- 9) IR sensor
- 10) 2 channel relay Board
- 11) Bread Board, LED's and few M2M& M2F jumpers.

McKEN IOT Certification Process

At the end of your course, you will work on a real time Project. You will receive a Industrial Level Problem Statement along with a Extra Hardware resources to work on.

Once you are successfully through the project (Reviewed by a IOT expert), you will be awarded McKEN IOT certificate with a performance-based grading.

If your project is not approved in first attempt, we'll offer you additional assistance to help you understand the concepts better and re-attempt the project free of cost.