

# IBM - Industry 4.0 With Internet of Things (IOT) Professional Program





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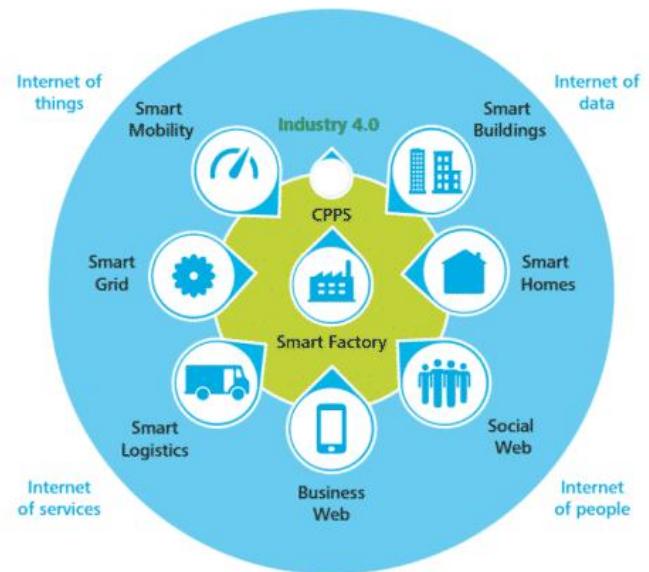
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# About the Program

The Industry 4.0 with Internet of Things (IoT) Professional Program equips professionals with essential knowledge and skills to navigate and lead in the era of the Fourth Industrial Revolution. This program explores the integration of IoT technologies into various sectors, driving efficiency, automation, and innovation.

With **IBM - Industry 4.0 with Internet of Things (IoT) Professional Program** Gain expertise in IoT, smart manufacturing, data analytics, AI, and cybersecurity to transform traditional industries into interconnected smart systems.



## What You Will Learn

**Node-RED** : Master the use of Node-RED, a powerful flow-based development tool for visual programming.

**Internet of Things** : Understand the core concepts and applications of IoT, enabling the creation of smart, connected systems.

**Robots are Coming! Build IoT Apps with Watson AI, Swift, and Node-RED** : Learn to build IoT applications using IBM Watson AI, Swift programming language, and Node-RED.

**Building Robots with TJBot** : Gain hands-on experience in building and programming robots using the TJBot platform.

**Node-RED: Basics to Bots** : Explore the basics of Node-RED and advance to creating sophisticated bots and automation solutions.

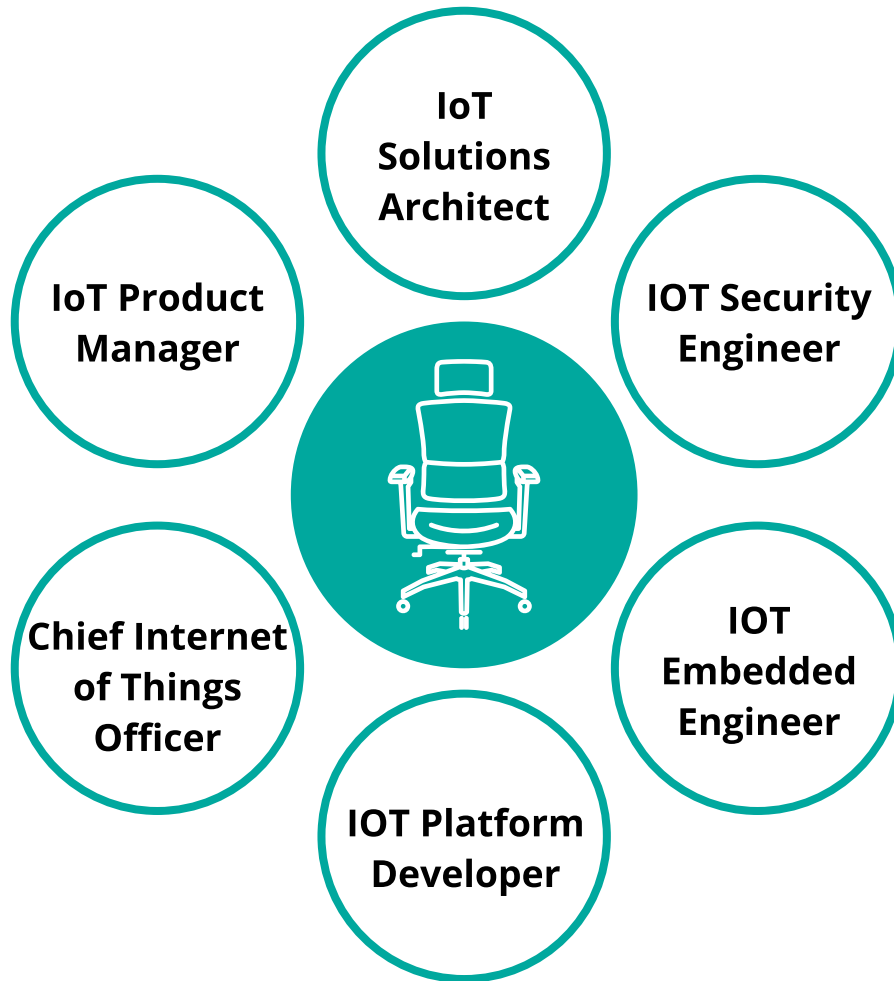
**Build an IoT Blockchain Network for a Supply Chain** : Learn to build a blockchain network specifically for managing and optimizing supply chains in an IoT environment.

## Market Growth and Economic Impact

The global Industry 4.0 market is experiencing exponential growth. According to recent reports, the Industry 4.0 market size is expected to reach USD 156.6 billion by 2024, growing at a compound annual growth rate (CAGR) of 16.9% from 2019 to 2024. The proliferation of IoT devices, advancements in artificial intelligence (AI), and the increasing adoption of smart manufacturing technologies are key drivers of this growth. Industries worldwide are investing heavily in IoT solutions to enhance productivity, reduce operational costs, and improve overall efficiency.



# Career Opportunities



## Course Benefits

**1200+**  
Enrolled

**4.8 / 5**  
Rating

Self Paced  
E-Learning  
Course Material

Lab/  
Assignments

Hands on  
Practice Test

**60+**  
Hours

**6**  
Months

Dought Cleanace  
Session

IBM  
Certifications

**100%**  
Job Assistance

# About TheLearnAge

TheLearnAge is your ultimate online educational platform offering over 350+ online courses designed to upgrade your skills and keep you ahead in today's smart world. With industry-leading partners such as **IBM, Microsoft, Cisco, Tally, Adobe, Autodesk, Apple, PMI, Meta, and many more**, you can learn directly from the experts and get certified in the latest technologies and tools that drive innovation.

TheLearnAge provides certification programs to validate skills and boost career opportunities within a flexible and innovative learning setting. Students have the freedom to engage with state-of-the-art curriculum at their preferred speed, enhancing their market value and competitiveness. With a user-friendly interface and a dedication to excellence, the platform guarantees a top-notch educational journey for skill improvement and career progression.

## Certified By



Master the future with TheLearnAge. Learn from the best, including IBM, Adobe, Autodesk, PMI, Cisco, Microsoft, Tally, Apple, Meta. Get certified in the latest technologies. Advance your career with flexible, expert-driven courses.



# Why TheLearnAge



## Extensive Course Selection

Offers over 350+ online courses covering a wide range of topics to upgrade skills and knowledge.



## Industry-Leading Partners

Collaborates with top industry leaders like IBM, Microsoft, Cisco, Tally, Adobe, Autodesk, Apple, and PMI, Meta, providing expert-led courses and certifications.



## Official Certification Program

Provides certification programs that validate learner's skills and credentials, enhancing their career prospects and competitiveness in the job market.



## Placement Opportunities

Enables learners to receive placement offers from big companies, boosting their employment potential



## Intuitive Interface

Features a user-friendly learning management system that makes course navigation and usage seamless.



## Marketability and Career Enhancement

Equips learners with the skills and certifications needed to succeed and stay competitive in today's rapidly evolving job market.

# Eligibility Criteria

For admission into this Full Stack Developer, candidates :

- ✓ 12th class or an 1 equivalent level.
- ✓ A degree/diploma in engineering
- ✓ A bachelor's or master's in computer science
- ✓ Inclination towards Programming
- ✓ Working Professional
- ✓ Any technical Degree



# How It Works!!!



## 1. Sign up

Sign Up with Mobile Number / Email Id.

## 2. Browse and Select

Once you have signed up and logged in, you can start exploring our wide range of specialized and job-ready e-learning programs & certifications.

## 3. Add Courses to Cart

After you've found the courses/ programs that align with your learning goals, you can add them to your cart.

## 4. Make Payment

When you are ready to enroll in your selected courses/programs, you can proceed to make the payment securely on our platform.

## 5. Confirmation Email

After successful payment, you will receive a confirmation email acknowledging your course/program enrollment within 24-48 Hours.

## 6. Access Course Materials

Once you receive the email with course links, you can access the course materials and resources.

## 7. Certificate Eligibility

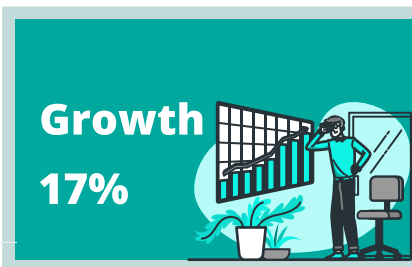
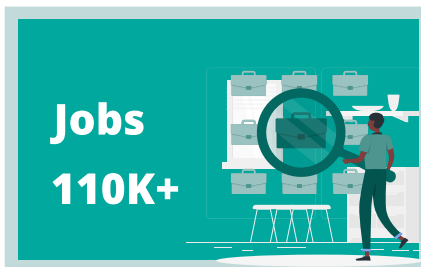
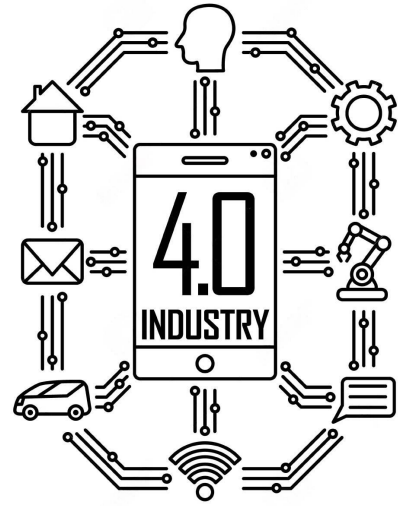
Complete your purchase course/ program within 6 months to be eligible for certifications.

## 8. Completion

You will have to give an online exam conducted by IBM and on passing that exam, you will receive your IBM certificates.

# Demand for Industry 4.0 With IoT

Industry 4.0 represents the fourth industrial revolution, characterized by the integration of digital technologies into manufacturing and industrial processes. At the heart of Industry 4.0 lies the Internet of Things (IoT), which enables the connection and communication of physical devices over the internet. This revolution is transforming traditional industries into smart, interconnected systems, driving efficiency, innovation, and economic growth.



## Key Industries Embracing IoT

**Manufacturing** : Smart factories equipped with IoT sensors and devices enable real-time monitoring, predictive maintenance, and automation of production processes. This leads to reduced downtime, optimized resource utilization, and increased productivity.

**Healthcare** : IoT devices in healthcare facilitate remote patient monitoring, telemedicine, and the management of medical equipment. These advancements improve patient care, reduce healthcare costs, and enable better management of chronic diseases.

**Agriculture** : IoT in agriculture, or smart farming, involves the use of sensors and data analytics to monitor crop conditions, soil health, and weather patterns. This helps farmers make data-driven decisions, leading to increased crop yields and sustainable farming practices.

**Logistics and Supply Chain** : IoT enhances supply chain visibility and efficiency by tracking goods in real-time, optimizing routes, and managing inventory. This reduces delays, lowers transportation costs, and ensures timely delivery of products.





# CAREER PATH WITH SALARY PACKAGES

**Entry-Level / Junior IoT Engineer**

**INR 5 L — INR 7 L Per Year**

**Mid-Level IoT Engineer**

**INR 10.5 L — INR 12.5 L Per Year**

**Senior IoT Engineer**

**INR 14.5 L — INR 16.5 L Per Year**

**IoT Solutions Architect**

**INR 22 L — INR 25 L Per Year**

**Director of IoT**

**INR 30 L — INR 35 L Per Year**



# Learning Path Structure

**1**

**Node RED**

**Internet of Things**

**2**

**3**

**Robots are coming! Build IoT apps with Watson AI, swift, and Node-RED**

**Building Robots with TJBot**

**4**

**5**

**Node-RED: Basics to Bots**

**Build an IoT Blockchain Network for a Supply Chain**

**6**



INDUSTRY 4.0



# Learning Path Details

## Course 1 : Node RED

Module 1 : Getting Started

Module 2 : Node Creation

Module 3 : Creating IOT Application using NODE-RED

## Course 2 : Internet of Things

Module 1 : An Introduction to IOT

Module 2 : Electronics Primer

Module 3 : Sensors & Actuators

Module 4 : Processing Elements

Module 5 : JavaScript Revisited

Module 6 : NodeJS

Module 7 : MQTT

Module 8 : Node-RED

Module 9 : IBM Bluemix

Module 10 : Way Forward



## **Course 3 : Robots are coming! Build IoT apps with Watson, Swift, and Node-RED**

# 3

Module 1 : Read temperature data from an IoT sensor section

Module 2 : Add a camera and analyze images section

Module 3 : Connect your app to an iRobot and smartphone section

## **Course 4 : Building Robots with TJBot**

# 4

Module 1 : Get started

Module 2 : TJBot and IBM Watson

Module 3 : Set up your environment

Module 4 : Quick labs

Module 5 : Complex labs

## **Course 5 : Node-RED: basics to bots**

# 5

Module 1 : Create your first Node-RED flow section

Module 2 : Build a web page and create a REST API in Node-RED section



Module 3 : Translate text, analyze tone, add audio, and send tweets from your Node-RED application section

Module 4 : Create cognitive web pages and a Messenger bot section

Module 5 : Build HTML web pages that use Git repositories that can reuse browser-side JavaScript section

## Course 6 : Build an IoT Blockchain Network for a Supply Chain

# 6

Module 1 : Set up the Particle Electron tracker device section

Module 2 : Watson IoT Asset Tracker application section

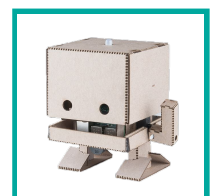
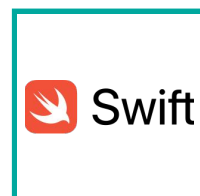
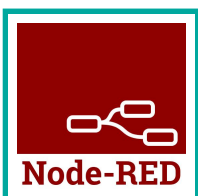
Module 3 : Lab 1: Build a blockchain network section

Module 4 : Lab 2: Set up the asset tracker application in Node-RED section

Module 5 : Understand the imported Node-RED flows section

Module 6 : Optional: Set up and run the Asset Tracker simulator section

## Course Inclusions



# Certification

Upon completion of this Self-paced E-Learning course and passing the online examination taken by IBM, you will receive an official IBM certificate to your registered Email ID.

You will receive 6 certifications from IBM for each of the courses in the learning path. These certificates will testify to your skills as an expert Data Science Engineer. These Certificates are recognized across the world.



**So be a part of the IBM Certified online courses program today and begin your journey towards a brighter future!**

# Job Placement Opportunities

All these following Companies are waiting for you :



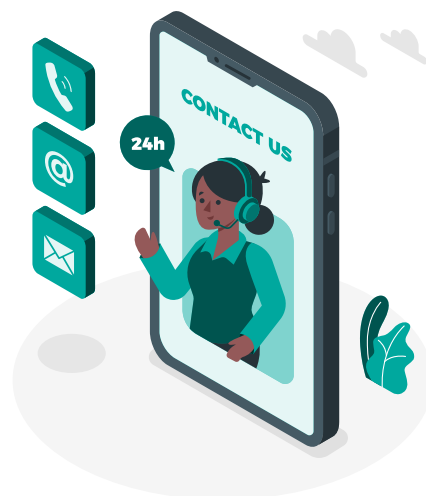
# Talk to Admissions Counselor

Our admissions counselors are prepared to address your questions or concerns about this program.


Our team is available to:

- Answer your questions about the admission process.
- Provide insight into the curriculum, program outcomes, and related information.
- Give any other queries.
- **Call Us : +91-75728 45000**

## Contact Us



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