



Internet of things

IOT



About Pavision Innovations

At Pavision Innovations, we are more than just a training platform – we are a community of innovators in education. Our IOT program equips you with the knowledge and skills to protect critical systems and networks in today's ever-evolving cyber landscape.

Unlock the Future with IoT

Glowlogics Edutech is proud to introduce a comprehensive course on Internet of Things (IoT), designed for students and professionals who are eager to dive into the world of connected devices and smart technologies.

What is IoT?

The **Internet of Things (IoT)** refers to the vast network of devices and systems connected to the internet, allowing them to communicate, collect, and exchange data. IoT is revolutionizing industries across the globe, from smart homes and cities to healthcare, agriculture, and manufacturing.

Course Outline

Module 1: Introduction to IoT

What is IoT?

- Definition and scope of IoT
- Evolution of IoT and its impact on industries
- Key components of IoT systems

Applications of IoT

- Smart homes, cities, healthcare, agriculture, and industrial IoT
- IoT in transportation and logistics

IoT Ecosystem Overview

- Devices, networks, platforms, and analytics
- IoT architecture: device, gateway, cloud, and application layers

Module 2: Sensors and Actuators

Introduction to Sensors

- Types of sensors: temperature, proximity, pressure, humidity, and more
- Role of sensors in IoT systems
- Sensor interfacing with IoT devices

Actuators

- Different types of actuators and their working
- Use of actuators in controlling devices
-

Module 3: IoT Networking & Communication Protocols

Connectivity in IoT

- Overview of IoT communication protocols
- Device-to-device, device-to-cloud, device-to-gateway communication

Module 4: IoT Platforms

Popular IoT Platforms

- Arduino, Raspberry Pi, and ESP8266
- Commercial platforms: AWS IoT, Google Cloud IoT, Microsoft Azure IoT

IoT Device Management

- Device registration, authentication, and management
- Over-the-air (OTA) updates

Module 5: Data Handling and Cloud Integration

Data Collection in IoT

- Data acquisition from IoT devices
- Streaming vs batch data processing

Cloud Computing for IoT

- Role of cloud platforms in IoT
- Storing, processing, and analyzing IoT data in the cloud

Module 6: IoT Data Analytics & AI

Data Analytics for IoT

- Introduction to big data and analytics in IoT
- Real-time vs batch analytics for IoT

AI and Machine Learning in IoT

- Predictive maintenance, smart automation, and AI-driven insights
- Machine learning models for IoT applications

Sample Projects

1. Smart Home Automation System
2. IoT-Based Weather Monitoring System
3. Smart Parking System
4. IoT-Enabled Health Monitoring System
5. Smart Irrigation System for Agriculture
6. IoT-Based Smart Street Lighting System

Career Opportunities

Upon completing the IOT Certification Program, students will be equipped for roles such as:

- IoT Developer
- Embedded Systems Engineer
- IoT Solutions Architect
- IoT Data Analyst
- IoT Security Expert
- IoT System Administrator

Certificates



Assured Interviews

As part of our placement support, we provide assured interview opportunities with leading companies in your field. Our dedicated placement team works tirelessly to connect you with the right employers based on your skills and interests.

The Course and Curriculum is designed by Mentors from



Get Started Today!

Contact Us:

Ready to take your career to the next level?

Contact us to learn more about our courses, flexible payment plans, and how we can help you achieve your career goals.

Phone: 6362243542

Email: help@pavision.in

Follow us on social media:

