

# **INDUSTRIAL INTERNSHIP**

# **ARTIFICIAL INTELLIGENCE**

A complete package - Beginner to Expert level ECE / EE / EEE / CSE



Visit Us: www.oltrongroup.com

Mail Us: services@oltrongroup.com

Contact Us: 7205005344

# ARTIFICIAL INTELLIGENCE

#### **Oltron Internship Program**

An internship is a short-term opportunity offered by organisations to students and graduates to gain work experience.

In our industrial internship program, we are offering courses for a limited period of time (ranging from a week to 6 months). Here you'll work on various innovative real-time projects & pick up industry-relevant skills.

#### **Mission & Vision**

Through This internship program our aim is to bridge the gap between what is taught in classrooms and what industries look for in recruits.

#### **Trainings Vs Internship**

Yes, they're as similar as star and starfish. Wait, what? Exactly! Training and internship are two completely different terms. A training refers to a series of lessons (offline or online) that are aimed at developing a particular skill while an internship is an opportunity to work in an organisation and contribute to its projects.

#### **About Artificial Intelligence**

Artificial Intelligence (AI) is a general term that implies the use of a computer to model and/or replicate intelligent behaviour. Research in AI focuses on the development and analysis of algorithms that learn and/or perform intelligent behaviour with minimal human intervention. Several research groups fall under the general umbrella of AI in the department, but are disciplines in their own right, including: robotics, computer vision, computational biology, and e-commerce.

RPA (Robotics Processed Automation) is a domain in AI that deals with the study of creating intelligent and efficient robots. It is a branch of technology which is used for making intelligent automation systems. It is now widely used to perform some high-precision jobs and also in some special situations that would be dangerous for humans like working in some toxic environment, in nuclear reactors etc. In terms of robotics and the science of robots embedded systems plays a very vital role as it is the backbone of artificial intelligence.

In this AI Module, we mainly focus on the artificial intelligence done with the hardware system in multiple fields like AI in Robotics, AI in Automobile vehicles, AI in industrial Automation Systems etc.

## Course at a Glance:

# Artificial Intelligence:

- Introduction to embedded system
- Study of basic electronics
- Analog and Digital electronics
- Artificial Intelligence
- Role of Artificial Intelligence
- Al Robotics Concepts
- Al Automation Concepts
- RPA Concepts
- Overview of electronic components
- Basic power electronics
- Power Supply
- Voltage Regulators
- Microprocessor and microcontroller
- Architecture of microprocessor and microcontroller
- Family of microcontrollers
- Introduction to AVR microcontrollers
- Arduino
- Study of Power supply to microcontrollers
- Input/output Ports of microcontrollers
- Input/output devices
- Registers in microcontrollers
- Pull up and pull down condition
- Memory Devices
- Software for Programming of AI
- Embedded Programming
- Digital Data Analysis with Controller
- Data Display System
- USART Communication Wireless
- Android USART Interface
- Bluetooth Communication
- Mobile Gesture communication
- ADC (Analog to digital Conversion )
- Analog DATA Analysis from Sensors
- Multiple Sensor Network for data matching
- Robotics Concepts



- Relay and its driver circuit
- LDR based automatic street light with intelligence based on Motion
- Line Follower Mechanism with AI
- Al as Tilt Detection in ultramodern vehicle protection system
- Bluetooth based robot with intelligence
- AI Based home automation
- Multi input as Artificial Intelligence in Automation and Robotics via Android
- Hybrid Vehicle with AI

#### SHOW STOPPER - WORKING WITH ARTIFICIAL INTELLIGENCE in HUMANOID

### Benefits towards Students from Internship Program

- Skill Development
- Better opportunities in corporate world
- Industrial Type Environment
- Familiar with latest technology
- Internationally Valid Certification -
- ISO Certified
- MSME (Govt. of India) Certified

Internship Fee: INR 5000/-

Time Duration: 4 - 5 weeks

<sup>\*\*</sup> Required kit will be provided by the company @ zero cost.