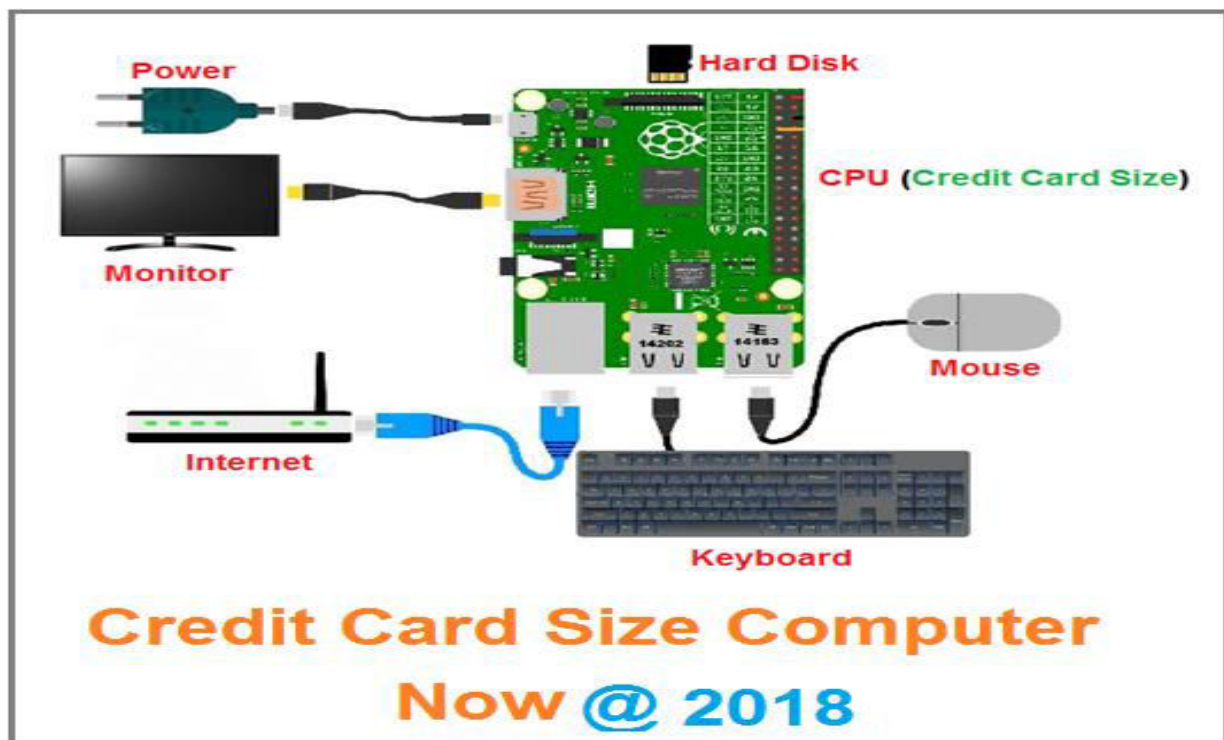# Embedded Technosolutions

Venture of IIT Bombay & VJTI Alumni

3 Times IIT Bombay Robo Competition Winner

Industrial Certified
Credit Card Size Computer Designing (US Based)

Credit Card Size Computer Now @ 2018

Skill India Mission

कौशल भारत - कुशल भारत

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3 Times IIT Bombay Robo Competition Winner

Robotics & Artificial Intelligence are the Future of Automation

Let Your Child Understand these Things at School Level so that They Become Future Ready With IIT Bombay Alumni

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IIT Bombay
Robo Competition
Winner

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EUROPACERT

Embedded Technosolutions

Shop No. C/20, 1st Floor, Amrita Sadan, Near Hotel Dwarka Nerul Railway Stations, Nerul West, Mumbai- 400706, Maharashtra, India

Has established and applies a Quality Management System for following scope of activities:

Imparting Engineering Professional Training And Engineering Project Exhibitions Engineering And Engineering Paper Publication

The Management System of the above organization has been audited and found to be in accordance with the requirements of management system standards Detailed Below:

ISO 9001: 2015

Certificate Number: 14464

Issue Date : 21st September 2017

Expiry Date : 20nd September 2020

Certification Manager

UKASCB
UNITED KINGDOM APPROVAL
SYSTEM FOR CERTIFICATION BODIES LIMITED

Europa Cert Inc.
Accredited By
United Kingdom Approval System For Certification Bodies Limited
27 Old Gloucester Street, London WC1N 3AX United Kingdom

भारत सरकार
Govt. of India
सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

MSME

उद्योग आधार **Udyog Aadhaar**

Type of Enterprise	Micro	Small	Medium
Manufacturing	A	B	C
Services	D	E	F
UAN	MH19E0006383		

E

Government of India (MSME)

Name of Enterprise : Embedded Technosolutions

Type of Organisation
Proprietary

Postal Address
Shop No.C/20,1st Floor ,Amrita Sadan, Near Hotel Dwarka,Nerul West,District - Mumbai City, State - Maharashtra, 400706

Email
info@ embeddedtechnosolutions.com

Majority Activity
Services

District Industry Centre   **UAN**
Mumbai City   MH19E0006383

Government of India (MSME) & ISO 9001-2015
Approved Organisation
Running by IIT Bombay & VJTI Alumni

Importance of Robotics Education at School Level

1. In A Survey Done by **"World Economic Forum"**,It has Proved that the Combination of Science, Technology, Engineering & Mathematics are Very Important to Improve the **"Analytical Skills"** at School Level

2. Apart from Theoretical Studies **"Project Based Learning"** is Very Important which Improves the Technical Intelligence, Innovations, Leadership Qualities, Analytical Skills & Team Management Qualities at School Level.

3. World is changing very fast. Ones upon a time there was a PC revolution, Then Mobile Revolution, now in future Robotics will be part of our lives.

4. The global robotics industry is growing rapidly and the trend towards its adoption is increasing in India as students.

5. Robotics will play a major role in the future so it is imperative that we prepare the present generation of students at school level for this transition

6. It Create curiosity, excitement and exploration among school children in Science, Mathematics and Technology.

7. Enable children to become motivated and engaged in Science, Mathematics and Technology (SMT) through observation, experimentation, inference, drawing, model, building, rational reasoning, test ability etc.

8. Whenever students work on any technical projects that improve their team activity.

9. They also have an opportunity to showcase their talent to the world through National & International level Robotics Competition.

Robotics Training Syllabus

Credit Card Size Computer
Std.7th to 12th

Theory

1. Introduction to Robotics

2. Robotics Mechanism & Computations

3. Science & Mathematical Principles used in Robot Building

4. Electrical & Mechanical Concepts Involved in Robot Building

5. Introduction to Various Major Components used in Robot Building

6. Schematic & Interconnections of Various Modules

7. Basic Robotics Module Designing

8. Program Raspberry Pi : a credit-card sized computer

9. Python programming for Raspberry Pi

10. Interacting and configuring the RPi OS

11. ARM 11 architecture

12. Porting of Linux Kernel and booting RPi

Module 1 : Arduino Platform

- Introduction to Open Source Platform Arduino

- Introduction to Arduino IDE

Module 2 : Arduino C Programming

- Embedded C Programming for Arduino

- Arduino Libraries & Basic Module Interfacing

- Logic Families

Module 3 : Wireless Communication Technology

- Introduction to Wireless Technology

- Introduction to Wireless domain Advantages & Applications

Module 4 : DTMF Technology

- Introduction of DTMF mobile technology

- DTMF technology interfacing in real application

- DTMF programming

Module 5 : Radio Frequency Technology (RF)

- Introduction of RF Communication

- RF technology interfacing in real application

- RF module programming

Module 6 : RFID Technology

- Introduction to RFID communication

- RFID technology interfacing in real application

- RFID module programming

Module 7 : Bluetooth Technology

- Introduction to Bluetooth Communication

- Bluetooth technology interfacing in real application

- Bluetooth module programming

Module 8 : Raspberry Pi Set up & Configurations

- Program Raspberry Pi : a credit-card sized computer

- Python programming for Raspberry Pi

- Interacting and configuring the RPi OS

- ARM 11 architecture

- Porting of Linux Kernel and booting RPi

Module 9 : Linux Command for Application Execution

- Linux Programming Basics

Module 10 : Raspberry Pi GPIOs

- Programming the GPIO and interfacing peripherals With Raspberry Pi

Module 11 : PWM Generation

- Generating PWM signals through the Pi for Various applications

Module 12 : UART Protocol & Interfacing

- Programming and work with UART protocol ,example Bluetooth

Module 13 : I2C Protocol Interfacing & Applications

- Work with I2C protocol

Module 14 : Camera Interfacing & Applications Designing

- Camera Libraries & Driver Installations

- Camera based applications designing

Module 15 : Raspberry Pi Webserver

- Remote Login methods: HyperTerminal, Ethernet

- LED Operation Using IOT

- Embedded Webserver

Module 16 : Computer App Designing

- Developing GUI with TKinter

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	Live Projects :
	Credit Card Size Computer & Arduino Based
1	Traffic Light Designing
2	DTMF Mobile Controlled Wireless Robot
3	RF Remote Control Robot
4	RFID Based Security System
5	Bluetooth & Android Based Robot Designing
6	Wireless Home Automation
7	Burglar Detection using Arduino
8	Traffic Light System
9	Environmental Parameters Measurement
10	Voice Control Home Automation
11	BlueSys using Bluetooth

12	Wireless Mobile Smart System
13	PWM Based Variable System
14	Camera based Surveillance System
15	GUI Based Home Automation using TKinter

Sr.No	Parameters	Schedule
1	**Duration**	12 Months Lectures on Saturday / Week
2	**Sessions**	1 Project / Per 4 Lectures (Theory + Modules + 15 Live Projects)
3	**Fee**	Rs. 3500 / Month

Contact Us

Contact Number

- 9224301650 (Whats App)

- 022- 62390060

Email Id

info@embeddedtechnosolutions.com

embeddedtechnosolutions@gmail.com

Website

www.embeddedtechnosolutions.com