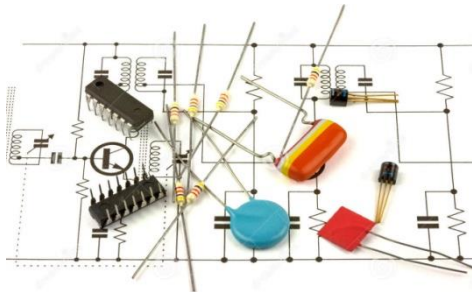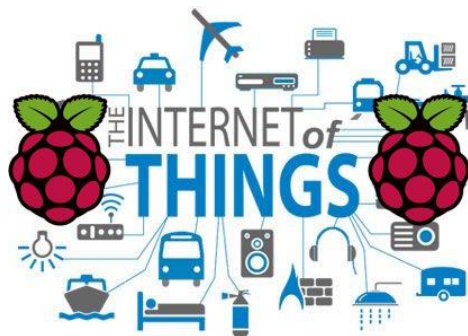# Industrial Internship Syllabus (EnTC & Electrical)
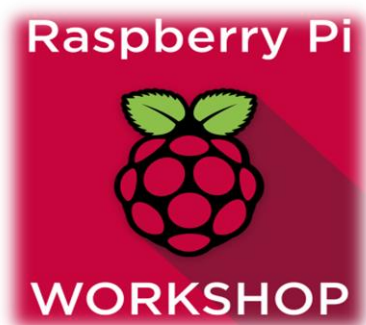

Basics of Electronics

Arduino

IOT

About the Team

MDB Electrosoft is conducting training program from last four years we provide industry oriented training which helps to integrate academics with real time corporate world.

Our Mission is to develop the technically sound, well skill students for industries and create maximum employment.

MDB Electrosoft is grooming electronics and software product Development Company. We develop electronics and software products which help society to make life easy and interesting. Our team is always dedicated for the Development and Innovations. Our research in a product development makes the product outlined as per client requirement. Our development strategy gives throughput which inclined with the user requirements. Our vision is to develop society oriented products which always dole out better life. Our economic policies give lot in less. Our product development starts from user's requirement and ends on efficient and well develop product. Our team has well experience and skilled experts who are able to give efficient and in time solution. Every solution provided by us is unique and innovative. Our approach has been always customer and market communication centric. We create products keeping our target consumer and audience in mind. Our expertise always focuses on market requirement and development.

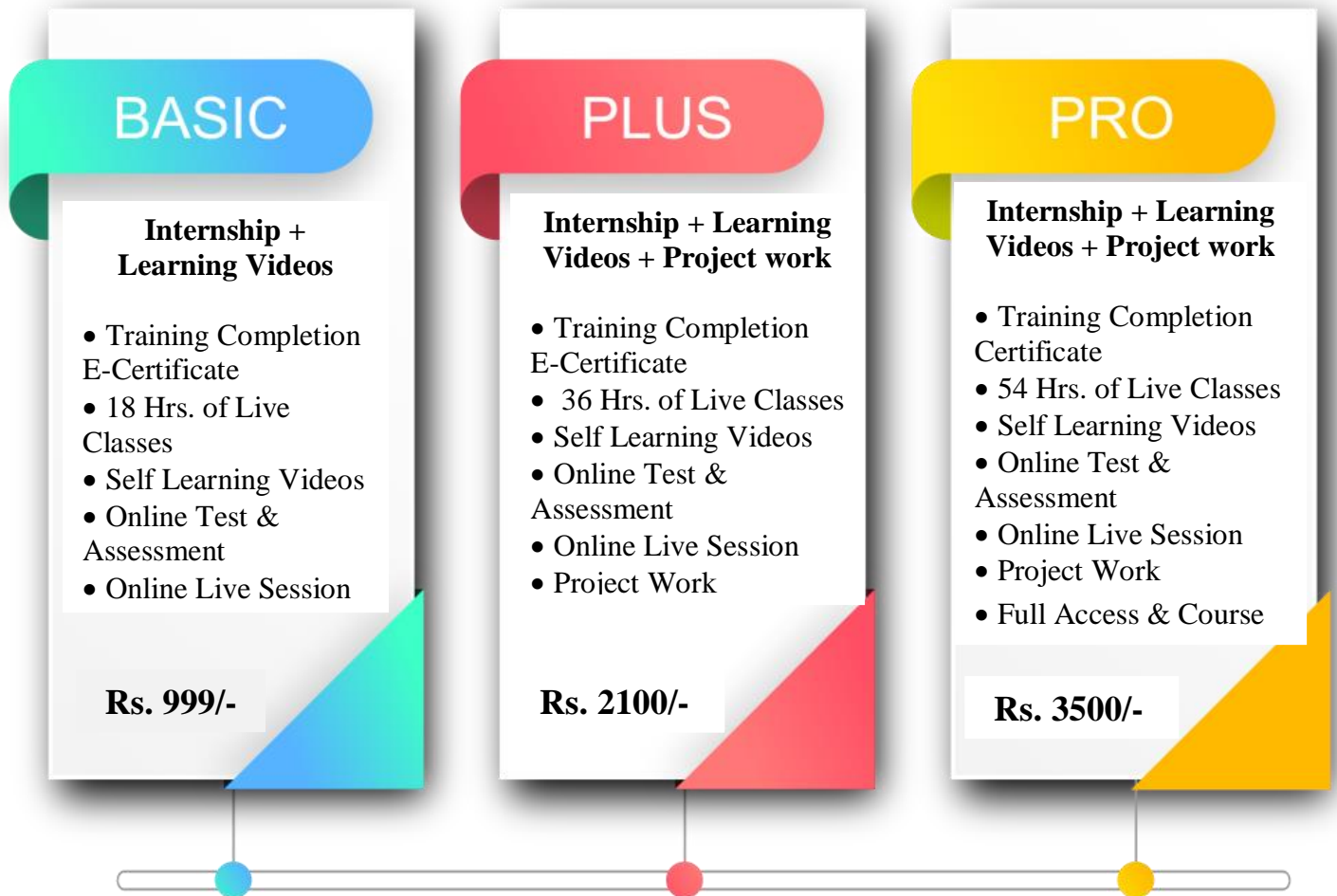| Sr. No.	Content
1.	**Introduction & Practical application of various components** a)Resister b) Capacitor c) Inductor d) Diode e) LED f)Multimeter g) Breadboard
2.	**Introduction to Breadboard**
3.	Practicals Performed with above components
4.	Practicals Performed with above components
5.	h) Transistor I) Switches j) LDR
6.	Practical Aspects of Above Components And Mini Project of Street Light Control
7.	**PCB Design Using CAD tool (PCB Design Software)**
8.	a) Types of PCB b) PCB Design Rules c) Introduction to PCB Design Software e) Practice of the software by designing of the PCB for various circuits d) How to print Soft design on actual PCB e) Etching of PCB f) Drilling of PCB
9.	**Regulated Power Supply** i) Circuit Design
10.	ii) PCB design iii)Etching of PCB iv) Drilling of PCB
11.	**Introduction to soldering** a) What is soldering Iron b) What is soldering c) Soldering Techniques e) Soldering practice
12.	**Introduction to datasheet**
13	**Running LEDs** a) Clock Design b)Introduction to 4017 c)Development of Running LEDs

14.	**Counter Design**
	   a) Introduction to 4026
	   b) Introduction to Seven segment common K and Common A and testing.
	Counter Design.

15	**Tester for Remote control** a) Introduction to IR receiver b) Introduction to IR Transmitter Design of Remote control Tester
16.	**Water Indicator Alarm**
17.	**Variable Power Supply** i) Circuit Design ii) PCB design iii)Etching of PCB iv) Drilling of PCB v) Component mounting vi) Testing of Power Supply.

Sr. No.	Content
1.	Introduction to Arduino board
2.	Installation of Arduino Software
3.	Pin mapping of Arduino with ATMEGA 328/ 8
4.	Software Basics
5	Intefacing of LED with board. Writing a program to on and off the LED with interval of 1 second
6	Embedded C programing basics
7	If loop, For loop, While loop, Switch-case statement syntax
8.	Interfacing of 7 segment displpay and its programming.
9.	Interfacing of Buzzer to genrate different audio tones.
10.	Intefacing of switch and LED to Board
11.	Interfacing of 16x2 LCD display and its Programming. Writing program for different display patterns on LCD.
12.	Displaying Names of student on LCD
13.	Scrolling names on lcd
14.	Changing name pattern on LCD by switch
15.	ADC Programming Writing a program to display analog voltage on LCD.
16.	Design of temperature indicatior and controlling System.
17.	Water level indicator
18.	Home appliance control using remote
19	Interfacing of Utrasonic sensor
20.	Serial Communication using Arduino
21.	Interfacing of Bluetooth Module
22.	Interfacing of Gas sensor
23.	Interfacing of Hall effect sensor

Sr. No.	Content
1	Introduction to IOT
2	IOT Architecture
3	Introduction to IoT Structure
4.	Installation of Software
5.	Interfacing of LED and programming it for blinking
6.	Interfacing of switch and programing it for different purposes Like Switching LED, Increment Display etc
7.	**Developing Complete application to control home appliances through IOT**
8.	Introduction to Thingspeak
9.	1) Opening Account on Thingspeak 2) Creating Channel on Thingspeak
10.	Programming of Hardware to send data on Thingspeak
11.	Vehicle Automation Using IoT(Project)
12.	Self driving car(Project)
13.	Remote Car unlock using Android App(Project)
14.	Motion Detector With NodeMCU (Project)

Fees Structure & Duration :-

BASIC

Internship + Learning Videos

- Training Completion E-Certificate
- 18 Hrs. of Live Classes
- Self Learning Videos
- Online Test & Assessment
- Online Live Session

Rs. 999/-

PLUS

Internship + Learning Videos + Project work

- Training Completion E-Certificate
- 36 Hrs. of Live Classes
- Self Learning Videos
- Online Test & Assessment
- Online Live Session
- Project Work

Rs. 2100/-

PRO

Internship + Learning Videos + Project work

- Training Completion Certificate
- 54 Hrs. of Live Classes
- Self Learning Videos
- Online Test & Assessment
- Online Live Session
- Project Work
- Full Access & Course

Rs. 3500/-

Summer Internship 2018 (Student From Various Colleges such as COEP, IIIT Nagpur, PRMITR, PRCEAM, HVPM COET, G.H.Raisoni)

STTP Workshop 2018 at P.R.Pote (Patil) Engg

RC Plane & Drone Workshop 2017 at P.R.Pote (Patil) Engg

IOT & Raspberry Pi Workshop At Ram Meghe Institute of Tech.Badnera

Ram Meghe Institute of Technology
&
Research, Badnera-Amravati

P.R.Pote (Patil) College of Engg.
&
MGMT,Amravati

Government Polytechnic,Arvi

Government Polytechnic, Amravati

H.V.P.M College of Engg.& Tech.
Amravati

Matoshri Vimlabai Jr College,Amravati
&

Independent Jr College Rural Institute,

Amravati

===

Office Contact: **For Details:**

MDB Electrosoft   **Cont: Mangesh Bharati**

Rajapeth-Ambadevi Road   **Director**

Near Oswal Bhawan, Amravati   **+91-9552811938 /+91-9604922180**