





















# IOT Training

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Sl. No.	Agenda	Start Time	End Time
	<b>DAY 1</b>		
1	Introduction	9.30	10.00
2	Introduction to IOT	10.00	11.15
3	Break	11.15	11.30
4	IOT Technologies	11.30	12.30
5	Q&A	12.30	1.00
6	Lunch Break	1.00	2.00
7	Introduction to Sensors	2.00	2.30
8	Introduction to RPi	2.30	3.00
9	Break	3.00	3.15
10	Setting up RPi – Hands ON	3.15	3.45
11	First Program with RPi – Hands ON	3.45	4.00
12	Thingspeak Integration with RPi – Hands ON	4.00	4.30
13	Introduction to Thingsboard and Setting UP – Hands ON	4.30	5.15
14	Q&A	5.15	5.30
	<b>DAY 2</b>		
1	Recap on Day 1	9.30	9.45
2	IOT Protocols	9.45	10.30
3	Build a basic Webserver [REST API] – Hands ON	10.30	11.00
4	Q&A	11.00	11.15
5	Break	11.15	11.30
6	Thingsboard and RPi GPIO Integration – Hands ON	11.30	12.00
7	Projects with Sensors – Hands ON	12.00	1.00
8	Lunch	1.00	2.00
9	Brainstrom Ideas	2.00	2.45
10	Build POC on IOT – Hands ON	2.45	3.15
11	Break	3.15	3.30
12	Hands ON with RPi	3.30	4.30
13	Implementation of IOT on various Fields – Brainstroming	4.30	5.15
14	Conclusion	5.15	5.30

## RPi 3 Pinouts

### Raspberry Pi 3 GPIO Header

Pin#	NAME		NAME	Pin#
01	3.3v DC Power		DC Power 5v	02
03	GPIO02 (SDA1 , I <sup>2</sup> C)		DC Power 5v	04
05	GPIO03 (SCL1 , I <sup>2</sup> C)		Ground	06
07	GPIO04 (GPIO_GCLK)		(TXD0) GPIO14	08
09	Ground		(RXD0) GPIO15	10
11	GPIO17 (GPIO_GEN0)		(GPIO_GEN1) GPIO18	12
13	GPIO27 (GPIO_GEN2)		Ground	14
15	GPIO22 (GPIO_GEN3)		(GPIO_GEN4) GPIO23	16
17	3.3v DC Power		(GPIO_GEN5) GPIO24	18
19	GPIO10 (SPI_MOSI)		Ground	20
21	GPIO09 (SPI_MISO)		(GPIO_GEN6) GPIO25	22
23	GPIO11 (SPI_CLK)		(SPI_CE0_N) GPIO08	24
25	Ground		(SPI_CE1_N) GPIO07	26
27	ID_SD (I <sup>2</sup> C ID EEPROM)		(I <sup>2</sup> C ID EEPROM) ID_SC	28
29	GPIO05		Ground	30
31	GPIO06		GPIO12	32
33	GPIO13		Ground	34
35	GPIO19		GPIO16	36
37	GPIO26		GPIO20	38
39	Ground		GPIO21	40