

PRABODHAN SHIKSHAN PRASARAK SANSTHA'S (Regd.No. E-697 Ratnagiri)

RAJENDRA MANE COLLEGE OF ENGINEERING AND TECHNOLOGY

Approved by AICTE, Recognised by D.T.E & Affiliated to University of Mumbai Accredited by NAAC with 'B+' Grade

Office: At & Po - Ambay (Devrukh) Tal - Sangmeshwar, Dist - Ratnagiri, Pin - 415804 (Maharashtra) **2**: (02354) 269400/269401 • Email: <u>info@rmcet.com</u> • Website: <u>www.rmcet.com</u> • DTE Code: <u>3202</u>

Report on Four days workshop on

"Internet of Things and serial buses"

Academic Year 2017-18

Resource person: Mr. Rajesh Ragase and Mr. Anand A. Raut

Prolific system & Technologies Private Limited, Pune.

Coordinator

: Mr. S. S. Bhandare (Assistant Professor, RMCET)

About workshop:

The four days intensive workshop on Internet of Things (IoT) conducted by Prolific system & Technologies Private Limited to involve students in a cohesive drive with the academia and industry towards excellence in Internet of Things (IoT) technology. This workshop is an attempt to cover material relevant to giving students necessary knowledge and skill set to appreciate the rapid changing scenario in Internet of Things (IoT) and take advantage of this in furthering their career. Practical/laboratory sessions are held. which will supplement the knowledge disseminated during the lecture sessions with adequate hands on experience.

Workshop is instructor-led, lab-intensive courses focused on the practical application of technologies through the facilitation of a projectrelated lab. More than 80% time was utilized for laboratory session. Duration:

It was four days workshop (From 25th to 28th March 2018). In these 4-days, student gained valuable hands-on experience.

Numbers of beneficiary

Totally 51 students of final year EXTC have attended this work shop.

Software Tools: 11 Keil IDE Version 2

2] Arduino IDE

3 | Flash Magic





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Course content:

Internet of Things

- > Introduction to IOT
- Current Business Trends in IOT
- > IOT Application architecture
- ➤ Introduction to ESP 8266
- > ESP Module Types and Features
- ➤ Introduction to node MCU
- Programming to ESP 8266 In Arduino
- ➤ How to connect to WIFI in ESP 8266
- ➤ How to Connect Access Point in ESP 8266
- Server & Client
- ➤ Home application using IOT

Serial Buses

- > Introduction to Serial Communication
- ➤ Introduction to I2C
- ➤ Peripheral Interfacing (Port Expander, ADC, RTC, EEPROM)
- > Introduction to SPI
- > Peripheral Interfacing (Master and Slave)
- ➤ Introduction to CAN







PROBOTATION STIKSHAN PRASARAK SANSTHAS (Regal to E-697 Ratinger).

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Hands on Experience







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Expert delivering session



Expert guiding students during practical session

Mr.S.S.Bhandare
In-charge Faculty

Mr. A.A.Tatugade HOD EXTC

Rajendra Mane College of Engin & Technology Ambay, Devri Sangameshwar Diet. Ra