Objective

The Internet of Things (IoT) is the network of physical objects — devices, vehicles, buildings and other items embedded with electronics, software, sensors, and network connectivity — that enables these objects to collect and exchange data. The Internet of Things allows objects to be sensed and controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit. When IoT is augmented with sensors and actuators, the technology becomes an instance of the more general class of cyber-physical systems, which also encompasses technologies such as smart grids, smart homes, intelligent transportation and smart cities. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. Experts estimate that the IoT will consist of almost 50 billion objects by 2020.

Organizers

Chief Patron	: **Shri Lalitbhai Mehta**
	Managing Trustee, VVPEC
Patron	: **Dr. Jayesh V. Deshkar**
	Principal, VVPEC
Conveners	: **Dr. Tejas P. Patalia**
	HOD, CE Department
	: **Dr. Charmy R. Patel**
	HOD, EC Department
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Expert Details

Mr. Jignesh Patoliya

[M.E. E.C., Guj. Uni., pursuing Ph.D. Emb. Sys. and IoT]

Assistant Professor in CHARUSAT

Mr. Ashutosh Bhatt

[M.Tech. in Emb. Sys. and VLSI, CHARUSAT]

Embedded Software Engineer in eInfochips Pvt. Ltd., Ahmedabad.

Technical Consultant at Intellectual Inspirations Pvt. Ltd., Ahmedabad.

Gujarat Technological University

Organizes
STTP
in Collaboration with

VVP Engineering College
(Affiliated to AICTE)

Computer Engineering and Electronics & Communication Engineering Department

ISTE Approved and GTU Sponsored

STTP on IoT & MicroPython

30th Oct'17 - 4th Nov'17

VVP Engineering College
Rajkot - 360005 (Gujarat)

Website : www.vvpedulink.ac.in
Tel. (O) 0281-2783394, Fax : 0281-2783487

Gujarat Technological University

Organizes

STTP

in Collaboration

with

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(Affiliated to AICTE)

Registration Form

Name:_____

Designation:_____Age:_____

Organization:_____

_____

Mobile No.:_____City:_____

Email id:_____

Educational Qualification:_____

Category:

☐ Student: Rs. 1000/-

☐ Research Scholar: Rs. 1000/-

☐ Faculty Member: Rs. 1000/-

☐ Industry Personal: Rs. 1200/-

Mode of Payment (Cash/DD/Cheque)

Draft/Cheque No.: _____

Issuing Bank: _____

(Cash is acceptable, DD must be in favor of
"**VVP Project Co-ordinator**", payable at Rajkot)

Date: _____   Signature

Send the filled application to:

VVP Engineering College,

Virda Vajdi, Kalawad Road,

Rajkot, 360 005.

OR

Send scanned application form and DD/Cheque to
sttpce@vvpedulink.ac.in

Last Date of Registration : - 26ᵗʰ oct'17

About VVP

The Vyavasayi Vidya Pratishthan Engineering College was established by Rajkot Nagarik Sahakari Bank Ltd. in 1996 to promote quality education in various technical fields. The institute is the first SFI in Saurashtra and Kutch region, recognized by All India Council for Technical Education (AICTE), New Delhi and the Government of Gujarat and is affiliated to Gujarat Technological University (GTU).

About Computer Engg. Department

The Computer Engineering department of VVP Engineering College, Rajkot affiliated with GTU, aims to provide a bridge between the latest Technology and the student's eagerness to acquire the knowledge. The Computer Engineering Graduates are the backbone of present and emerging computational era. As reflected by our academic programs and student and faculty activities, our top ranking Computer Engineering department has made a strong and continuing commitment to engagement with our students, our colleagues in other academic disciplines, and to the expanding circles of our local, regional, national and international communities. We place a heavy emphasis on hands-on learning: our instructional laboratory facilities are extensive and state-of-the-art, due to continual investment in upgrades and replacements. We offer a course on Bachelors & Master's degree in Computer Engineering since the inception of the institute.

About Electronics & Communication Engg. Department

Electronics and Communication Engineering Department of VVP Engineering College is one of the most dynamic and leading department in Gujarat Technological University with their excellent result and highest placement. The highest qualified staff being expert of their own field is the asset of the department. The laboratories' cost is worth Rs. 1.6 crore because of continuous investment and up gradation and they are highly advanced laboratories, very well equipped with multiple set-ups that satisfy the quest of the students. We elaborate and emphasize much more on practical hands-on ability and innovation to make our students "industry-ready". We offer a course on Bachelor's and Master's degree in Electronics and Communication Engineering at our institute.

Who should attend?

B.E/B.Tech/M.Tech Students/Ph.D Scholars & Faculty Members of following branches: Electronics, Electronics & Communication, Electrical, Computer Science, Information Technology, Computer Engineering, B.SC(IT), M.SC(IT), BCA, MCA

Course contents

☐ Basic Python Programming

☐ Getting started with MircroPython & Firmware

☐ Interaction of Embedded System to Physical world

☐ IoT Architecture & Getting Familiar with various IoT Devices

☐ Introduction to ESP8266 and NodeMCU – WiFi Modules

☐ Understanding the architecture of ESP8266

☐ Interactive computing with NodeMCU using MicroPython

☐ Experimenting with sensors & actuators

☐ Offline & online webserver

☐ Android Application development

☐ IoE Protocols: HTTP & MQTT

☐ Data Logging using NodeMCU and Cloud Services

☐ IoE using Packet Tracer

☐ Getting started with Raspberry Pi

☐ GPIO Programming of Raspberry Pi

☐ ArduiPi & wiringPi

☐ Visual Programming: NodeRed

☐ Getting started with C.H.I.P.

☐ Real Time Operating System