



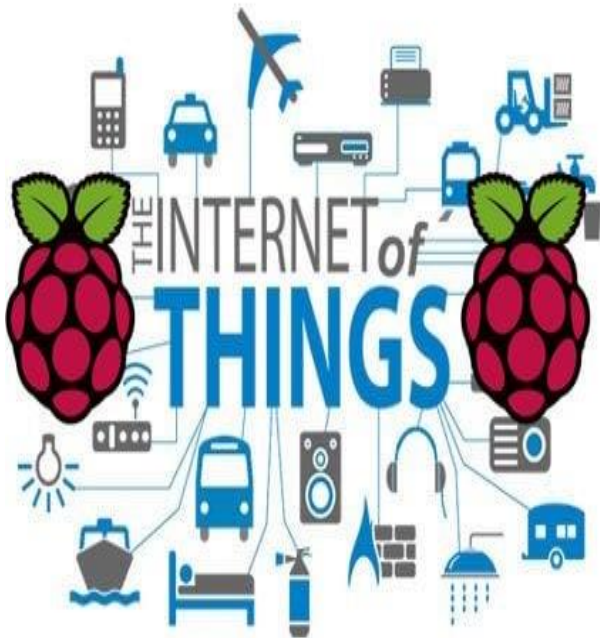
**VIT**<sup>®</sup>  
Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

## School of Electronics Engineering (SENSE)

Department of Micro and Nanoelectronics

Value Added Programme  
On

## Internet of Things in Electronics



*Course dates*

*14, 15, 21, 22 September 2024 &  
6<sup>th</sup>, 20<sup>th</sup> October 2024*

### About Training:

The Internet of Things (IoT) in Electronics using Raspberry Pi is a specialized course that introduces students to the integration of IoT with the versatile Raspberry Pi platform. This value-added course focuses on using Raspberry Pi, a powerful and affordable microcomputer, to develop smart electronic devices and systems. Students learn to interface sensors, actuators, and other hardware components with the Raspberry Pi, programming it to collect, process, and transmit data over the internet. The course covers essential concepts like Python programming, networking, and IoT protocols, empowering students to create innovative IoT projects. By mastering IoT using Raspberry Pi, students gain practical skills that are highly relevant in today's technology-driven world.

### Who Can Attend?

Only VIT Students [UG /PG students]

### Key Benefits:

The Internet of Things (IoT) in Electronics using Raspberry Pi value-added course offers numerous benefits to students and professionals alike:

- ❖ **Hands-on Experience:** Learners gain practical skills by working directly with Raspberry Pi, sensors, and actuators, enabling them to build and deploy real-world IoT applications.
- ❖ **Affordable and Versatile Platform:** Raspberry Pi provides a cost-effective and flexible platform for experimenting with various IoT projects, making it accessible for extensive learning and innovation.
- ❖ **Innovation and Creativity:** The course encourages innovative thinking by allowing learners to conceptualize and develop unique IoT solutions addressing various real-world challenges.

Overall, this course empowers individuals with the knowledge and skills to excel in the rapidly evolving field of IoT, leveraging the capabilities of Raspberry Pi to create impactful and intelligent electronic solutions.

**Last date for Registration: On or before: 12<sup>th</sup> September, 2024**

### Course Fee:

*Registration Fee: VIT Student: Rs.590/- (Inclusive of GST) Certificate and Course Material will be provided.*

### Course Content:

- *Arduino Basics*
- *ESP 8266 interfacing*
- *Advanced Topics in Raspberry Pi*
- *Building Voice Technology on IoT*
- *Sound sensors and actuators- pattern recognition for speech Technology*
- *Speech and sound modules for IoT devices.*
- *IoT protocols*
- *Applications of IoT- Home Temperature Monitoring System- Home Weather Station*

### Convener:

Dr. Sivanantham S  
Professor and Dean,  
School of Electronics Engineering,  
Vellore Institute of Technology,  
Vellore, India.

Dr. Jagannadha Naidu K  
Associate Professor & Head,  
Department of Micro and Nano Electronics,  
School of Electronics Engineering,  
Vellore Institute of Technology,  
Vellore, India.

### Coordinators:

Dr. Vetriveeran Rajamani  
Dr. D. Somasundaram

### For Registration contact:

Dr. Vetriveeran Rajamani  
No.: 7530055178

### Registration Link:

<https://events.vit.ac.in/>

**Event Venue: TT 727, Technology Tower**