

About the Event

The Value-Added Program on Smart Embedded Systems and Sensors (VAC1846) provides practical training in embedded system design and sensor interfacing. The program introduces fundamental concepts of embedded systems, including digital and analog input/output operations, pulse-width modulation (PWM), and serial communication. Participants will also learn important communication protocols such as I2C and SPI, along with concepts of interrupts, timers, and sensor interfacing used in real-world embedded applications. The course further introduces Internet of Things (IoT) concepts, demonstrating how embedded systems interact with sensors to collect and process real-time data. The program concludes with a capstone project, enabling participants to apply their knowledge in developing smart embedded solutions for modern engineering applications.

Lectures Scheduled

- Introduction to Embedded Systems
- Digital Input and Output (I/O)
- Analog Signals and Pulse Width Modulation (PWM)
- Communication Protocols
- Motor controls Application
- Interrupts and Timers in Embedded Systems
- Interfacing Sensors with Embedded Systems
- Internet of Things (IoT) Concepts and Applications
- Hands on Project Development



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

A Value Added Program on *Embedded Programming for Sensor Systems : Smart Embedded Systems and Sensors - (VAC1846)*



Total Program Duration: 30 Hours

Schedule: 31st July 2026 Onwards

Organised by
TIFAC-CORE Research Center
Vellore Institute of Technology,
Vellore, India.

Registration fee: Rs. 199/- (Including GST)

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

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