



VELLORE INSTITUTE OF TECHNOLOGY

School of Electronics Engineering (SENSE)

Department of Communication Engineering

ONE-DAY HANDS-ON WORKSHOP ON

Hands-On Raspberry Pi: From Secure IP Tunnelling to Multi-Node MQTT Broker Setup



December 05, 2026
(Saturday)



**School of Electronics
Engineering (SENSE)**
VIT, Vellore – 632014



One Day
(8 Hours
Hands-On)



Remote Access

Secure
IP Tunnelling



Raspberry Pi
(MQTT Broker)



ESP32
(Node 1)
Publisher



ESP32
(Node 2)
Subscriber

WHY ATTEND THIS WORKSHOP?



Raspberry Pi OS setup and headless SSH access



Linux networking, IP routing, subnetting,
NAT and CGNAT



Secure tunnelling with SSH, WireGuard,
Tailscale, Cloudflare Tunnel and Ngrok



Deploying and securing Eclipse Mosquitto
MQTT Broker



ESP32/ESP8266 publisher-subscriber nodes



Real-time multi-node data exchange



Industry use cases and practical vision

RESOURCE PERSON:



Dr. S. Ganesh Prabhu

Engineer – Embedded Division,
Caliber Interconnects Solutions Pvt. Ltd.,
Coimbatore

CONVENERS:



Dr. M. Jasmine Pemeena Priyadarsini
Dean / SENSE

Dr. D. Kannadassan

HoD, Communication Engineering

COORDINATORS:



Dr. Karthikeyan M., Assoc. Professor

Dr. Naveen Mishra, Assoc. Professor

REGISTRATION FEE



UG / PG / Research Scholar – ₹300

Academicians – ₹400

Industry Personnel – ₹500

WHO CAN PARTICIPATE?



✓ UG / PG / PhD Students

✓ Faculty Members

✓ Industry Delegates



Last Date to Register: December 04, 2026



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