

About the event:

The Value-Added Program on Robotic Fundamentals and Introduction to ROS (VAC2412) offers immersive, hands-on training in modern robotics. The course introduces learners to robot dynamics, kinematics, sensing, perception, and motion control, followed by practical exposure to Robot Operating System (ROS)- the industry-standard middleware for robotics. Participants will learn ROS essentials including nodes, topics, messages, and services, and will work with real robotics simulation tools such as Gazebo and RViz. The course includes running SLAM algorithms on the Turtlebot simulation platform, enabling students to understand autonomous navigation and mapping concepts used in real-world robots. This weekend-friendly course bridges theory with extensive hands-on sessions, preparing students for careers in robotics automation, intelligent systems, and autonomous navigation.

Lectures Scheduled:

- Robot Dynamics and Kinematics
- Robot Sensing and Perception
- Robot Motion Control, Localization and Mapping
- Getting Started with Ubuntu (ROS Environment Setup)
- Introduction to ROS: Nodes, Topics, Services, Packages
- ROS Simulation using Gazebo and RViz
- Implementing SLAM in Robotic Simulations

Mode: Hybrid mode

Offline Venue: TT 231/232

Time: 10 AM to 2 PM

Online Platform: Microsoft Teams

Time: 07:30 PM to 09:30 PM

Registration Link:

(Last Date: 14th January 2026)

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

Sessions are planned to be conducted during the Week-ends and evenings (according to flexible timings of students).
Special Consultation with Industries for developing own projects.

Advisory Committee:

Dr. M. Jasmin Pemeena Priyadarisini

Professor and Dean,

School of Electronics Engineering (SENSE),

Vellore Institute of Technology, Vellore, India.

Dr. D. Kannadasan / HoD

Department of Communication Engineering,

SENSE, VIT Vellore.

Dr. Sathya P / HoD

Department of Sensor and Biomedical

Technology, SENSE, VIT Vellore.

Coordinators:

Dr. Budhaditya Bhattacharya, Professor

Dr. Mohiul Islam, Assistant Professor

Dr. Kathirvelan J, Professor

School of Electronics Engineering,

Vellore Institute of Technology, Vellore – 632 014.

Contact Numbers: 9944658860 / 9854662380

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j.kathirvelan@vit.ac.in

Resource Persons from:

Vellore Institute of Technology, Vellore

IIIT Hyderabad



Registration fees for Participants (External and Internal)

**UG/PG/Ph.D Students: Rs. 300/-
(including GST)**

*(Accommodation will not be provided to
external participants)*

**E-Certificates will be provided
on successful completion**



Value Added Course on

VAC2412: Robotic Fundamentals and Introduction to ROS



**19th January 2026 to
4th April 2026**

**Organized by
Department of
Communication Engineering
&
Department of Sensor and
Biomedical Technology**

**School of Electronics Engineering
(SENSE)**

**Vellore Institute of
Technology, Vellore**

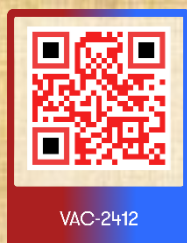


Value Added Course on VAC2412: Robotic Fundamentals and Introduction to ROS

19th January 2026 to 4th April 2026

Course Schedule

S. No	Date	Day	Time	Mode
1	19/01/2026	Monday	7.30 PM-9.30 PM	Online
2	20/01/2026	Tuesday	7.30 PM-9.30 PM	Online
3	03/02/2026	Tuesday	7.30 PM-9.30 PM	Online
4	04/02/2026	Wednesday	7.30 PM-9.30 PM	Online
5	10/02/2026	Tuesday	7.30 PM-9.30 PM	Online
6	11/02/2026	Wednesday	7.30 PM-9.30 PM	Online
7	21/02/2026	Saturday	10.00 AM-2.00 PM	Offline
8	02/03/2026	Monday	7.30 PM-9.30 PM	Online
9	03/03/2026	Tuesday	7.30 PM-9.30 PM	Online
10	24/03/2026	Tuesday	7.30 PM-9.30 PM	Online
11	25/03/2026	Wednesday	7.30 PM-9.30 PM	Online
12	31/03/2026	Tuesday	7.30 PM-9.30 PM	Online
13	04/04/2026	Saturday	10.00 AM-2.00 PM	Offline



Registration Fee:

Students/Research Scholars: INR 300/-
(including 18% GST)

Registration Link:

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

Target Audience ()

UG/PG Students/Research Scholars

Contact:

Dr. Budhaditya Bhattacharya | budhaditya@vit.ac.in | 9944658860

Dr. Mohiul Islam | mohiul.islam@vit.ac.in | 9854662380

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www.vit.ac.in

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