FROM CAD TO MULTIPHYSICS
REAL-WORLD SIMULATION USING ANSYS

NIT MEGHALAYA

23rd – 27th Feb 2026 / 09:00 AM – 04:00 PM

Last date for Registration: Feb. 19, 2026
Maximum participants will be 30 and will be selected on first come first serve basis

SCAN TO REGISTER

About

Ansys 5 days workshop at NIT Meghalaya is an exciting opportunity to explore the cutting-edge applications of simulation technology in academia and industry. this interactive session is designed to provide students and educators with insights into Ansys solution for Chemical Engineers. Ansys simulation solutions enable materials and chemical process companies to dramatically improve overall equipment effectiveness (OEE), capacity and raw material utilization, resulting in more efficient operations and reduced costs.

From equipment and processes to chemical and petrochemical refining to glass, polymer, and metals manufacturing, Ansys simulation solutions accelerate innovation for tomorrow's advanced materials systems while helping our customers conserve energy, minimize environmental impacts, meet higher regulatory standards, and streamline product development.

Join us to dive into the world of simulation and discover how Ansys Empower future engineers and researchers.

Agenda

DAY	TIME	TOPIC	LAB DETAILS
23-02-2026	9.00am-12:30pm	2D, 3-D Cad modeling using Ansys spaceclaim with Industrial Example	CSE LAB 3
		Solid Advanced modeling -Drone	
	12:30pm-02:00pm	*Lunch*	
	02:00pm-04:00pm	Repairment of Imported cad model	
		Introduction to Meshing	
		Global and local Method Meshing technique	

DAY	TIME	TOPIC	LAB DETAILS
24-02-2026	9.00am-12:30pm	Introduction to CFD	CSE LAB 3
		Hands on Internal Flow Simulation-Heat transfer problem	
	12:30pm-02:00pm	*Lunch*	
		Hands on Internal Flow-Combustion Problem	
	02:00pm-04:00pm	Hands on -External flow over a 2D & 3D body	

DAY	TIME	TOPIC	LAB DETAILS
25-02-2026	9.00am-12:30pm	Introduction to FEA	CSE LAB 3
		Hands -Structural analysis of Mechanical Component	
	12:30pm-02:00pm	*Lunch*	
	02:00pm-04:00pm	Hands on-Thermal Analysis of Mechanical Components	

DAY	TIME	TOPIC	LAB DETAILS
26-02-2026	9.00am-12:30pm	Introduction to Vibration Analysis	CSE LAB 1
		Hands on Modal and Harmonic Analysis	
	12:30pm-02:00pm	*Lunch*	
	02:00pm-04:00pm	FEA analysis of a Drone-Structural, Thermal & Vibrational Analysis	

DAY	TIME	TOPIC	LAB DETAILS
27-02-2026	9.00am-12:30pm	Introduction to Multiphysics Analysis & Additive Solution-3D printers	CSE LAB 2
		FSI-Fluid Structure Interaction- 1 Way Fsi	
	12:30pm-02:00pm	*Lunch*	
	02:00pm-04:00pm	2-way FSI	

Learning Outcomes

By the end of the session, participants will be able to:

- Develop and repair 2D & 3D CAD models suitable for numerical simulations.
  Implement efficient meshing techniques for CFD and FEA applications.
- Analyze fluid flow and heat transfer problems using CFD tools.
  Evaluate structural, thermal, and vibration behavior of engineering systems.
- Integrate multiphysics approaches, including Fluid–Structure Interaction and additive solutions.

Coordinator

Dr Koushik Das
Associate Professor
National Institute of Technology, Meghalaya

Speaker

Rohit Sangwant
Technical Lead
Digital Manufacturing
ARK Infosolutions PVT LTD

Organising Team

Dr. Koushik Das, Chairman
Dr. Sambit Majumder, Convenor
Mr. Pratit S. Dev Roy, Member

Eligibility:

Students from B.tech , M.tech, PhD. Scholars

*e-certificates will be provided to the candidates attending all the sessions