

Test and Optimization Laboratory – Siemens Centre of Excellence (SCoE)

About the Laboratory

The lab addresses complex engineering challenges.

The lab safeguards the balance between technological design options and functional performance of systems.

We can solve noise, vibration, harshness (NVH), acoustics, durability, dynamics, structural testing, flow simulations, performance and fuel economy issues by testing and optimizing through available softwares.

Key software facilities: Simcenter 3D, STAR-CCM+, Simcenter Nastran, Simcenter Amesim, and Simcenter Testlab.

Industry solutions offered: Structural Analysis, Fluid Flow Analysis, Thermal Analysis, Durability Analysis, Engine Simulation, Battery Analysis, and Multibody Simulation.

Faculty In-Charge

Dr. Vikas Kumar

Technical Staff

Mr. Deepak

Laboratory Courses Conducted

S. No.	Course Name	Programme (B.Tech./M.Tech./Ph.D.)
1	Test and Optimization Laboratory	B.Tech./M.Tech./Ph.D.

Major Equipment/Software

S. No.	Name of Major Equipment/Software	Quantity	Utilization (B.Tech./M.Tech./Ph.D.)
1	Simcenter 3D	–	M.Tech./Ph.D.
2	STAR-CCM+	–	M.Tech./Ph.D.
3	Simcenter Nastran	–	M.Tech./Ph.D.
4	Simcenter Amesim	–	M.Tech./Ph.D.
5	Simcenter Testlab	–	M.Tech./Ph.D.

Laboratory Photographs



Picture 1

SCADAS Vibration and Modal Analysis



Picture 2

SCADAS Mobile Enhanced



Picture 3