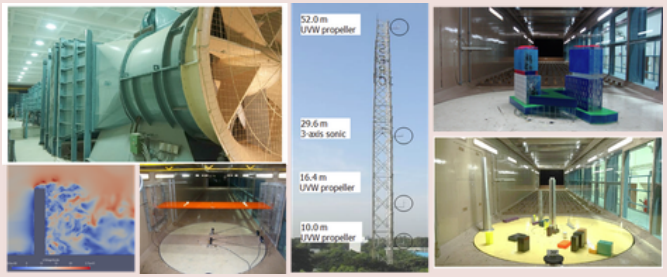
Advanced Course on

Wind Loads and Effects on Structures (WiLES - 2026)

16-18 December 2026
(under CSIR Integrated Skill Initiative)



Organised by
CSIR- Structural Engineering Research Centre
(An ISO 9001: 2015 certified organisation)

About CSIR-SERC

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai, is one of the national laboratories under the Council of Scientific & Industrial Research, India. CSIR-SERC has built up excellent facilities and expertise for analysis, design and testing of structures and structural components. Services of CSIR-SERC are being extensively used by the Central and State Governments and public and private sector undertakings. Scientists of CSIR-SERC serve on many national and international committees. The Centre is recognised at the national and international levels as a leading research institution in Structural engineering.



Wind Engineering Laboratory (WEL)

Wind Engineering Laboratory of CSIR-SERC has a State-of-The-Art Boundary Layer Wind Tunnel (BLWT) facility, which is one of the largest BLWTs currently available in our country. The research group at WEL has developed expertise in conducting wind tunnel investigations on reduced scale models of buildings/structures, full-scale field experiments on cyclone wind characteristics along with structural response of towers under ambient wind conditions, and Computational Fluid Dynamics simulations on bluff bodies, in line with International practices. Cyclone Disaster Mitigation is one of the major thrust areas of research in the laboratory. WEL has contributed towards formulation and revision of various Indian codes of practice relevant for wind loads. WEL has also been continuously providing high-end technical service to the industry via consultancy / sponsored projects.

Background

The evaluation of wind loads for the design of buildings/structures necessitates understanding of the random nature of wind and its effects on buildings/structures. The present academic curriculum for Civil/Structural Engineering provides limited coverage of Wind Engineering. This course aims to provide clear exposure to the fundamentals of Wind Engineering and background to the design practices adopted for evaluating the wind loads that govern the structural design of buildings and various types of structures.

Objectives

The primary objective of the course is to provide an opportunity for practicing design engineers, consultants, engineering professionals, researchers and academicians in familiarising themselves with basic and design wind speed, design wind pressure, wind loads and their effects on buildings/structures by providing background to relevant codes of practices.

Course Contents

- Introduction to Wind Engineering
- Background to basic and design wind speeds given in IS 875 (Part 3)
- Bluff-body aerodynamics
- Dynamic wind effects on buildings and structures
- Background to Gust Factor
- Wind loads and their effects on chimneys, tall buildings, long span bridges, low-rise industrial structures, lattice towers, wind turbine support structures, etc.

Visit to various laboratories of CSIR-SERC will also be organised.

Faculty

Faculty for the course would comprise mainly scientists from CSIR-SERC and few experts from academia and industry.

Prerequisites

The course registrants can ensure adequate knowledge on the background to course contents to fully exploit the benefits of attending the advanced course.

Venue & Duration

Training and Development Complex, CSIR-SERC, Chennai. Timing: 9.30 a.m. to 5.00 p.m.

Registration and Fee

Rs. 3000/- per participant inclusive of GST for working professionals, Rs. 1500/- for student participants and US $ 450/- for foreign delegates. Presentation material (in .pdf format) and participation certificate will be provided to all the registered participants. The course registration can be completed via online form with the URL below:

https://serc.res.in/course

Travel, Boarding and Lodging Arrangements

The participants or their sponsoring organisations must bear travel, boarding and lodging expenses. Limited accommodation in the Guest House/Trainee's Hostel at CSIR-SERC Campus may be arranged on a first-come-first-served basis at extra cost. Participants wishing to avail of this facility are advised to write to the course coordinator well in advance, and in any case, not later than 07th December 2026.

Scan QR code for course promo

Contact Us

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