25th National Training Course on

WIND ENERGY TECHNOLOGY

21st to 23rd February 2024





NATIONAL INSTITUTE OF WIND ENERGY

An Autonomous Research and Development Institution
Ministry of New and Renewable Energy, Government of India
Chennai



Renewable Energy in particular Wind and Solar has become the mainstay in meeting energy needs having achieved grid parity in term of costs as well as technical requirement. The wind energy has proved a highly successful energy option with installed capacity of 1TW worldwide by June 2023. Earth's commercially viable wind power potential is estimated to be huge and only very few countries are using wind power at a large scale like USA, European countries and Asian countries - China and India. Even though a good potential of wind is available in many countries, the wind power project is hindering because of the lack of skilled human resources at various stages of deployment.

The National Institute of Wind Energy (NIWE), under the Ministry of New and Renewable Energy (MNRE), Government of India has pioneered in promoting Wind Energy and has contributed for promotion of wind energy as one of the primary energy sources in India. Decades of concerted efforts have started to yield gratifying results and today, Wind power contributes about 10.38% (44183.63 MW) of the total Indian energy mix of 425406.47 MW and stands fourth in terms of installed wind power capacity worldwide as on September 2023. Today, India is a major player in the global wind energy market with a sustainable annual growth rate. The key factors responsible for this phenomenal success were the policy support from the Central, especially by the MNRE and the technical support extended by NIWE. NIWE has already successfully conducted 57 national and 46 international training courses and trained 2094 and 1036 professionals respectively from 102 countries. With the vast experiences in conducting training courses, NIWE has an obligation to disseminate the right knowledge learnt to foster growth of wind energy not only in India but also across the globe. In this connection, the 25th National Training Course is proposed to address all aspects of wind energy starting from introduction to wind technology, wind resource assessment, installation & commissioning and operation maintenance of wind farms along with financial aspects and testing & certification of wind turbines in a focussed manner.

METHODOLOGY & COURSE OUTLINE

The lectures often include exercises and case studies to stimulate active participation and dialogue. This training course is intended to cover a wide variety of key topic such as

- Introduction to wind energy, evolution & developments
- Government policies and supportive schemes & programme
- Wind resource assessment
- Design of carefully vetted wind farming projects
- Installation & commissioning of wind farms
- Grid Integration
- O&M aspects of wind farms
- Hybrid systems

THE PROGRAMME & SCHEDULE

The duration of this Training Course is 3 days encompassing presentations, detailed lectures with case studies, success stories along with exercises and visits to laboratories. The dates for the training is from 21st to 23rd February 2024.

COURSE OBJECTIVES

The objective of the training course is to transfer knowledge and special skills to the wind energy personnel active in technical and operational fields as well as those who are looking for entry in wind energy sector. The idea is to provide specialised training and knowledge to industry, utilities, project developers, investors, consulting firms, technical and academic institutions, students, bankers and various Central and State governmental implementing agencies. Moreover, the course will provide an invaluable platform for dialogue and open exchange of views and experiences.

TARGET PARTICIPANTS

The targeted participation strength would be around 30 to 40 persons. The course will be useful for anyone who is involved in wind energy field and those who are looking for an introduction. Persons in the following areas will find this course very relevant

- Academic and R&D Institutions
- Wind Turbine Manufacturing Companies
- Project Developers and Investors
- Consulting Firms
- Government Organizations

- State Nodal Agencies (SNA's)
- Suppliers and Distributors
- Independent Power Producers (IPP)
- Financial & Insurance Institutions

RESOURCE PERSONS

NIWE scientists / engineers will be the resource persons for the training course.

REASONS TO ATTEND

The course will offer a good foundation on the principles of engineering behind wind energy technology, power generation & distribution along with financial viability and entrepreneur opportunities. It would also outline the Government policies and wind energy scenario in India. It would facilitate an invaluable platform for dialogue and open exchange of views and sharing experience among participants with experts in the field. It would give a picture of the know-how and pave the way to go about setting up a financially viable wind farm project.

REGISTRATION

The enclosed Registration Form filled in all respects may be sent to NIWE filled **on or before 07/02/2024** along with the Course Fee. Due to limited number of seats, acceptance of nominations will be on the "First-come, First Served" basis subject to the receipt of full Course Fee of Rs.5,900/- or Rs.17,700/- including GST of 18%.



VENUE

The venue for the programme would be the **Conference Hall of National Institute of Wind Energy**, Chennai.

COURSE FEE

This is a non-residential training course. The Course Fee is Rs. 5,900/- (Rs.5,000/- plus 18% GST of Rs.900/-) for student and Rs. 17,700/- (Rs.15,000/- plus 18% GST of Rs.2,700/-) for others. Students need to provide a supporting letter from the Head of the Institution / Department along with Bonafide Certificate and valid ID card. The Course Fee includes lunch, refreshments and excludes accommodation. The Course Fee must be paid by Demand Draft drawn in favour of the "National Institute of Wind Energy" payable at Chennai or online transfer. The details for payment through online is made available in the following link at NIWE website (https://niwe.res. in/assets/Docu/RTGS_document-sb_account.pdf). Canara Bank (Branch code 2874), NIOT Branch, SB Account No.: 2874101011793 IFSC Code: CNRB0002874.

CANCELLATION & SUBSTITUTION

We take utmost care in providing quality lectures and hospitality with appropriate advanced planning. The course structure & organization of training has been highly acclaimed by all the previous course participants. The registration without the Course Fee on or before the due date does not confirm the reservation for the course. Cancellation of registration will be entertained until 07.02.2024 only with a written request. The refund of Course Fee will be done after deducting handling charges of Rs. 1000/-. The cancellation request received after 07.02.2024 will not be eligible for refund. In case the training is cancelled or postponed by NIWE full refund will be given as the case may be. Substitution can be allowed with prior intimation and submission of new Registration Form. NIWE reserves all rights to postpone or cancel the course with due intimation to all concerned.

COURSE COORDINATOR

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ABOUT NIWE

National Institute of Wind Energy formerly Centre for Wind Energy Technology shortly known as NIWE is an autonomous R&D institution established in 1998 at Chennai by the Ministry of New and Renewable Energy (MNRE), Government of India. It is a premier institution with highly experienced professionals having expertise in all related disciplines of wind energy sector. NIWE is a forward looking and practical institution always well placed to take the next logical steps towards advancing wind technology in the right direction. With its progressive approach to all wind energy related science and technology from onshore to offshore, NIWE assures assistance from resource assessment (both wind and solar, RE forecasting for Energy production) to project implementation. As an integral part of NIWE, a world class accredited services providing Wind Turbine Test Station (WTTS) is established at Kayathar, Tamil Nadu. NIWE is the only NABL & NABCB Accredited agency in India doing Testing & Certifying.

NIWE has been vested with the responsibility to provide complete scientific and technical backing to all stakeholders in the field of wind energy and has stated its commitment through its quality policy.

QUALITY POLICY

NIWE is committed to provide credible, prompt and complete solution of international quality to all the stakeholders in the wind energy sector by complying applicable standards & guidelines and to enhance customer satisfaction, loyalty and confidence by meeting their requirements.

NIWE, strives to be technical focal point of excellence for the present and future. NIWE shall stay at the forefront of Wind Energy Application by continually improving its expertise.



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