



NATIONAL POWER TRAINING INSTITUTE

(MINISTRY OF POWER, GOVT. OF INDIA)

Pallipuram P.O, Cherthala, Alappuzha District, Kerala – 688541



विद्युत मंत्रालय
MINISTRY OF
POWER



PROGRAM BROCHURE

01 YEAR POST GRADUATE DIPLOMA COURSE (PGDC)

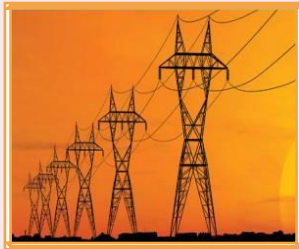
in

RENEWABLE ENERGY

&

GRID INTERFACE TECHNOLOGIES

SEPTEMBER 2023 -24



MORE THAN FIFTY YEARS OF SERVICE TO THE POWER SECTOR - एनपीटीआई के साथ पावर सेक्टर का सुनिश्चित समपूर्ण विकास

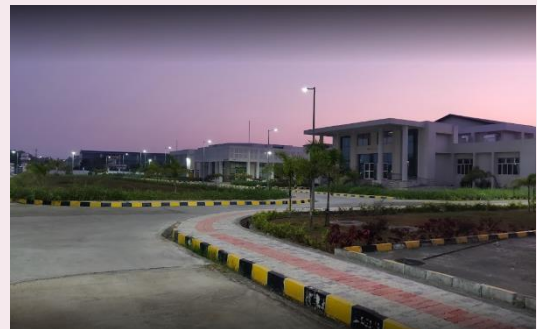
About NPTI

National Power Training Institute (NPTI), has been set up by MINISTRY OF POWER (GOVT. OF INDIA) to function as a National Apex body for Human Resources Development in Power Sector with its Corporate Office at Faridabad. NPTI has been providing its dedicated service for more than five decades.

NPTI has trained over 3, 60,000 Power Professionals in regular programs over the last 5 decades. NPTI is the world's leading integrated power training Institute. NPTI is the only institute of its kind in the world with such a wide geographical spread and covering a wide gamut of academic and training programs in power sector. NPTI's committed faculty is providing excellent training in the power sector, which is the most important sector among various infrastructure sectors. A number of programs for national as well as foreign customers have been conducted. These programs have benefitted the executives from different organizations. Training provided by NPTI on Power Plant Simulators has improved Plant Load Factor of Generating Units also has increased the availability of Transmission & Distribution System and has decreased Aggregate Technical & Commercial Losses. This in turn is providing more power to the country. Thus, the training being provided by NPTI is having a cascading effect in the growth of GDP and the economy of the country.

ABOUT NPTI, ALAPPUZHA

National Power Training Institute (NPTI), Alappuzha, Kerala, an ISO 9001 & ISO 14001 Organization under Ministry of Power, Govt. of India is pleased to introduce ourselves as a National Apex body for Training and Human Resources (HR) Development in the Power Sector. NPTI with its pioneering services in Human Resource development has rendered its services in the power sector for more than five decades. We are imparting training relating to Operation & Maintenance of the electric power plants/systems in the field of Thermal, Hydro, T&D, Renewable Energy and Latest trends in Power Sector including Smart Grid to Working professionals of various power utilities/organizations.



About Venue

The state of Kerala, India's most verdant state, rated by National Geographic Traveler as one of the world's 50 must-see destinations, is a paradisiacal landscape of palm-lined beaches, steamy jungles, plantation-covered hills, and tropical rivers and lakes. NPTI, Kerala is located at Pallipuram, near Cherthala railway station in the district of Alappuzha. The Venue is well connected with roads, rail and by Air. The nearest Airport is Cochin International Airport about 60 Kms away. The Venue is at the midway around 35 Kms away from Alappuzha railway junction and Ernakulam railway Junction. Alappuzha or Alleppey, known as the "The Venice of the East" is an entrancing region of awe-inspiring natural beauty with the Arabian Sea on the west and a vast tangle of cerulean lakes, serene backwaters and freshwater rivers. In the recent days, Alappuzha has developed as a major backwater tourist center and is renowned for its pristine beaches, exciting boat races, romantic houseboat holidays and coir industry.

ABOUT THE POST GRADUATE DIPLOMA COURSE:

NPTI weaves formal education with industry oriented specialized skills to cater the needs of Power Sector. In one of its most successful attempts to create a pool of technically trained manpower for ready availability for recruitment by PSUs/SEBs/Power Utilities/IPPs. NPTI launched a 26 weeks duration being conducted by this institute. The objective of the program is to understand the characteristics of Renewable Energy generation including fundamentals, applications, commercial aspects, Grid Interface challenges and regulatory provisions of Renewable Energy Technologies with special thrust to Solar Technology, Regulatory Framework and Energy Management. Renewable Energy Technologies are now fundamental for the growing global effort to combat the effect of climate change. This Program is designed with the objective of developing the skills of the participants in tapping sources of Renewable Energy, its engineering design, and related equipment details and management.

WHY YOU SHOULD JOIN?

The Indian Renewable Power Sector with approx. 500 GW installed capacity requires trained man power for not only meeting existing requirements but also to handle new technologies and modernized power stations. The technical knowledge acquired from Engineering Colleges provides the basic foundation, which needs to be supplemented with the Applied Engineering skills so as to groom the engineers for efficient functioning at every stage of planning, designing, engineering, procurement, construction, commissioning, operation, maintenance, transmission and distribution of power supply Industry with a view to build adequate technical capacity and develop economically viable Energy sector and energy efficient systems and compliance of laudable objectives of the Govt. of India, adequate scientific, technical manpower at all levels is a pre-requisite. The main aim of the course is to create a pool of technically trained manpower readily available for recruitment to the State, Central and Private Power Utilities and allied Industries.

ELIGIBILITY:

B.Tech. / B.E. or its equivalent in Mechanical, Electrical, Electrical & Electronics, Electronics & Instrumentation, Control & Instrumentation, Mechatronics, Power Engineering and related branches. Those appearing in their final year examination can also apply. However, they must submit their final degree/provisional degree/ proof of pass certificate (downloaded copy of mark sheet) at the time of counselling.

TRAINING / TEACHING METHODOLOGY

To achieve the objectives of providing total concept of Renewable Energy Interface & Grid Technologies, different types of Learning situations have been created /organized. These are:-

- Class room lectures for imparting formal, theoretical and technical knowledge.
- Case studies / Group discussions.
- Self-learning techniques, like computer based self-learning training packages, Audio Visual Programs etc.
- Practical training in laboratories & workshop.
- Technical visit to various renewable power generation plant.

Through simulation techniques and on-job training in power stations. The training methodology so adopted creates step by step environment for all round development of skills and knowledge of the participants.

PLACEMENT

In order to provide career opportunities in the Indian Power Sector, NPTI maintains close linkages with the power utilities and reputed concerns for placement of trained engineers. In Companies like ABB, Abellon Clean Energy, Adani Green, Bajaj Green Energy, BSES, , CRISIL, ESSAR POWER, Amplus Solar, Shell, GMR Renewable Energy Limited, HCL, HINDALCO, ICRA, IEPL, India Bulls, Indian Energy Exchange, IL&FS, IREDA, Hindustan Power, Jindal Power, KPMG, KSK Energy, LANCO, L&T, Indian Biogas Association, Mytrah Energy, NALCO, NDPL, PTC, PwC, Reliance Industries, Reliance Power, SIEMENS, Su-Kam, SUZLON, TATA Power Solar Systems Ltd Torrent Power, Vedanta, Welspun, Re-New Power Ventures Energy etc. visited NPTI for placement of students of various courses. Sponsored candidates are not eligible for Campus Placement.

Excellent placement assistance shall be given. However, placement is not guaranteed.

ON-JOB TRAINING

On-job training is an essential supplement to formal training which provides the trainees an understanding of the functions through involvement with real work situations. Special stress is laid on acquisition of required skills for undertaking specific responsibilities in a particular area of work. On-job experience simplifies and consolidates the knowledge in a Power Sector sphere for which special type of work books have been designed according to the needs of area where on-job training is conducted. On-Job training & plant visits arranged at nearby substations & Renewable parks.

FACILITIES AT NPTI, KERALA:

LABORATORY:

NPTI, Alappuzha firmly believes in providing its trainee's exposure to National and International Knowledge experts through various training programs. NPTI Alappuzha have built well equipped laboratories and workshops with wide ranging facilities for imparting training to Technicians, Operators and Engineers in various aspects of Power Stations. Some of the areas where expertise has been built are:

1. MULTIFUNCTIONAL SIMULATOR

The Simulators replicating the real-time integrated Unit operations for 210MW, 500MW, 800MW, Thermal Units, 250 MW Hydro Unit with additional functionalities of SCADA & Smart Grid are being established.

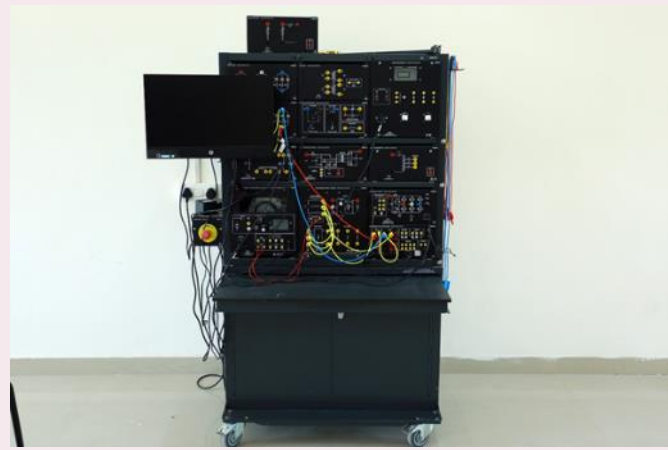
The training on the multifunctional configured simulators may be on only the Thermal Power Plants (210/ 500/ 800 MW) or an integration of Thermal, Hydro (250 MW), SCADA and Smart Grid or even a integration of Thermal, Hydro (250 MW), SCADA and Smart Grid Hands on training on either of the combinations would give a perfect understanding of integrated operation of the power plant & power system.



2. Smart Grid Lab:

Trainer kits available in the Smart Grid Lab are:

1. High Voltage Transmission Line and Protective Systems Trainer/Simulator Kit
2. High Voltage Direct Current Transmission (HVDC) Trainer/Simulator Kit
3. Smart Grid Trainer/Simulator Kit.



The High Voltage Transmission Line and Protective Systems Trainer/Simulator shall be capable of imparting training in Transmission lines and Cable System and shall be a standalone system. The High Voltage Direct Current Transmission (HVDC) Trainer/Simulator shall be capable of imparting training in HVDC systems and shall be a standalone system.

The Smart Grid Trainer/Simulator shall be capable of imparting training on Smart Grid functionalities.

3. Renewable Energy Lab:

Trainer kits available in the Renewable Energy Lab are:-

1. Wind Power Plant Trainer/Simulator kit
2. Solar Photovoltaic (PV) Trainer/Simulator kit
3. Micro grid Trainer/Simulator kit



SMART CLASS ROOMS:

The classrooms are well designed to incorporate everything needed for a pleasant learning atmosphere. There are Seven class rooms and one E-learning room which are air conditioned and well-furnished. Each class room can accommodate 50 participants.



STUDENT /TRAINEES HOSTEL:

Separate hostel facility is available for ladies & gents. During the contact classes, simulator training at NPTI, Kerala and on-job training, the trainees can stay in the hostel and hostel is provided on nominal charges. Hostellers shall take food in hostel on payment basis.



AUDITORIUM

The Institute is having AC Auditorium equipped with Audio-Visual System & having capacity of 200 persons.



HOW TO APPLY

Applications are to be filled online with payment of prescribed **Application fee of ₹500/- (including GST)**. Candidates must pay the application fee in online mode through SBI Collect. Eligible candidates can fill the application form online through the **Google form**. <https://forms.gle/GvzU8TnZo1AQak289>

For detailed course curriculum and the future notifications/ information will be available on website. The candidates are advised to be regularly in touch with the website. <https://nptikerala.in>

QR code for the Application form



COURSE FEE DETAILS FOR PGDC IN RENEWABLE ENERGY INCLUDING SOLAR TECHNOLOGY

1	Course fee for the Non-Sponsored candidate	Rs. 2,30,000 + 18% GST per participant with following details: a) Registration Fee of Rs.20,000/- +18% GST to be paid at the time of counselling for confirmation of admission. b) Rs. 1,00,000/-* +18% GST towards 1st installment of course fee within 01 month of course commencement. c) Rs.1,10,000/- + 18% GST towards 2nd installment of course fee within 01 month of the start of Second Semester.
2	Course fee for the sponsored candidate from utilities	Rs. 2,30,000+ 18% GST per participant

BOARDING & LODGING

The boarding and lodging charges are extra. Rooms will be provided on twin sharing basis.

- ❖ Twin Sharing Accommodation shall be provided if available on the chargeable basis of Rs. 48000/ + applicable GST for 01 Year. However, the Hostel fees may be paid in 2 installments if required.

Application Fees:

<https://www.onlinesbi.com/sbicollect/icollecthome.htm>

Click **SBI Collect** -Select State as **HARYANA** and Select Educational Institution as **"NATIONAL POWER TRAINING INSTITUTE – Haryana"**, then select payment category as **"Institute Fee Payment"** and finally fill up all the given mandatory fields. Click to proceed for payment

For mandatory payments by students of NPTI:

- i. All students of NPTI (all 11 Institutes) are required to Select Payment Category as “Institute Fee Payment” for making payments of Tuition Fee, Hostel Charges etc.
- ii. Fill the details and make the payment to NPTI (Institute name is required to be selected in “Course Studying at NPTI”).

All the students have to make the payment as above only for studying any course at any NPTI.

For any other type of payments by Organizations/Clients/other persons:

- i. Select the appropriate payment category as applicable like for making Invoice or Bill payment to NPTI then Select Payment Category as “Invoice/Bill Payment” for making payments to NPTI.
- ii. Fill the details and make the payment to NPTI.

THROUGH UPI PAYMENT MODE:

G PAY/PAYTM/PHONE PE etc. to **NPTI, FARIDABAD, HARYANA** account as below: -

Name of the Institute : **NPTI, FARIDABAD, HARYANA**
Name of the Bank : **State Bank of India**
Account No. : **10724879119**
Branch : **Sarai Khwaja, Faridabad**
IFSC code : **SBIN0003245**

CONTACT DETAILS:

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IMPORTANT DATES FOR THE PROGRAM

<i>Direct Admission starts from</i>	<i>01.08.2023</i>
<i>Last Date of submission of application (Online/Offline)</i>	<i>08.09.2023</i>
<i>Date of Counseling</i>	<i>11.09.2023</i>
<i>Tentative Commencement of the program</i>	<i>18 .09.2023</i>

ADDRESS FOR COMMUNICATION

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www.nptikerala.in

