

For website

Course Name: 4 weeks On-Line Summer Training Program on “Power & Energy Technologies”

Objective: To familiarise the Graduate Engineers with Power & Energy Technologies

Duration: 4 weeks (27th July to 21th August, 2020)

Mode of Training: On-Line

Registration Fees for College students: Rs 3000/- Per Participant + 18%GST = **Rs 3540/-**

Who May attend: College students-Engineering (Pursuing) in Electrical, Mechanical, Instrumentation and Electronics Engineering.

For Registration:

<https://forms.gle/J1RKhaetY5C3R5KR7>

Documents Required: Kindly upload Student College Id Card.

Students will get Certificate after completion of training program.

For On-Line payment

Through SBI Collect (<https://www.onlinesbi.com/prelogin/icollecthome.htm>--> Select State-Haryana->Select Type-Educational Institutions->National Power Training Institute, Sector-33, Faridabad)

NEFT/IMPS/RTGS

National Power Training Institute

(State Bank of India, Sarai Khawaja, Faridabad, A/C-10724879119, IFSC-SBIN0003245)

Course Coordinator: Mahendra Singh, Asstt.Director, 09999670968, Mahendra.npti@gov.in

4 weeks On-Line Summer Training Program on “Power & Energy Technologies”

Course Outline

- Overview of Electricity and Power
- Global Power Scenario
- Indian Power Scenario
- Electricity supply and Economic Growth
- Power and Energy Resources
- Conventional and Renewable energy resources
- Overview of Different types of Conventional Energy resources
- Overview of different types of Renewable energy resources
- Energy generation from Coal, Hydro, Gas, Tidal etc.
- Energy generation from Solar, Biomass, Waste, Wind etc.
- Overview of different types of coal and Coal energy. World and Indian Scenario of Coal.
- Overview of Electricity Generating electrical equipments like Synchronous generator, wind generator etc.
- Electricity Transmission and distribution equipments like Power and Distribution Transformer, Switchgear, Current & Voltage Transformer, Isolators, Lighting Arrestor, PLCC etc.
- Overview of different types and make of circuit breakers like air circuit breakers, minimum oil circuit breaker, Air circuit breaker, vacuum circuit breaker and SF6 breaker etc.
- Overview of Transformer components and constructional details.
- Electricity Generation from Solar energy, various equipments used in solar energy Installations.
- Solar Energy generation analysis using PV sys Software.
- Overview of Micogrid, Macrogrid and Hybrid Renewable energy system.
- Introduction of Control Loops in Electrical Power Generation.
- Measurement of various parameters in Electrical systems like voltage, current, Power, Temperature, Vibration, Pressure etc. Using electronics measurement devices.
- Overview of Supervisory control and Data acquisition System.