



NATIONAL PRODUCTIVITY COUNCIL

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(UNDER DPIIT, MINISTRY OF COMMERCE & INDUSTRY, GOVT. OF INDIA)

Short Term e-Learning Certificate Course

INDUSTRIAL ENERGY EFFICIENCY

Duration 8 Weeks Starting from 01st October 2020

ABOUT NATIONAL PRODUCTIVITY COUNCIL:

National Productivity Council of India (NPC) is a national level organization to promote productivity culture in India. Established by the Ministry of Industry, Government of India in 1958, it is an autonomous, multipartite, non-profit organization. NPC is a constituent of the Tokyo-based Asian Productivity Organization (APO), an Inter Governmental Body, of which the Government of India is a founder member. Professional consultancy services are provided by NPC covering major sectors of Indian economy with emphasis on improvement of productivity, quality, profitability, and growth at entire organizational level.

Introduction to the Course:

Course ID: BBSEMSTC-01-2020

In a rapidly growing economy of India, the Energy requirement has been increasing at a very fast pace. India is among the leader of world in terms of primary Energy consumption. Energy Intensity is one of the highest in the world. Within a period of 18 years, from 2000 & 2018 the Primary Energy consumption in India has increased from 295 MTOE to 753.7 MTOE. The prime focus for Energy Efficiency has been the Industrial sector being the major consumer. National Productivity Council (NPC) is a pioneering institution in India providing consultancy and training services in the area of Energy Management since 1964. Energy efficiency can position businesses more competitively in global markets and can have a significant impact on your bottom line by lowering your energy bills, reducing equipment maintenance and replacement costs, and increasing the asset value of Industries.

For achieving the broader objective, as a part of NPC's Industrial Capacity Building program, NPC offers eight weeks assisted short term E-learning course on "Industrial Energy Efficiency".

Coverage:

Module A: Introduction to Industrial Energy Management (2 Week)

1. Introduction to Energy & Energy Profile
2. Energy and the Environment
3. Integrated Energy Policy
4. Energy Conservation Act

Module B: Energy Performance of Industrial Utilities- Part-1 (2 Weeks)

1. Industrial Energy Sources & Conversion
2. Boiler & Furnace
3. Steam and Process Heating
4. Heat Exchanger
5. Air conditioning and refrigeration

Module C: Energy Performance of Industrial Utilities- Part-2 (2 Weeks)

1. Plant Electrical Distribution System
2. Motors and Drives
3. Compressed Air System
4. Industrial Fans
5. Pumping System
6. Industrial Lighting

Module D: Energy Performance Assessment Tools (2 Week)

1. Energy Efficiency Data Analytics
2. Measurement & Verification of Energy Performance
3. Energy Management System Certification
4. Behavioral Energy Efficiency

For Registration Visit:

www.npcindia.gov.in

[NPC e-Learning](#)

Course Fees
Rs.7500/- + GST

Reading Materials & Lecture Notes

Module Wise Assessment

50% as min Qualifying Criteria

8 Weeks Course (1st Oct – 27th Nov 2020)

40 Hrs Online Assisted Learning

Certificates on successful completion

Course Director:

Shri Avijit Nayak, Dy. Director (EM)

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INDUSTRIAL ENERGY MANAGEMENT

Duration: 8 Weeks/2 Months

1st October 2020 – 27th November 2020

PROGRAM SCHEDULE

Modules	Date and Time
Module A: Introduction to Industrial Energy Management (2 Week)	01.10.2020 to 17.10.2020
Orientation of Participants	01.10.2020 (16:00 hrs to 17:00 hrs)
Week 1	
1. Introduction to Energy & Energy Profile	O2.10.2020 to 10.10.2020
2. Energy and the environment	Online class- 10.10.2020 (14:00 hrs to 18:00 hrs)
Week 2	
3. Integrated Energy Policy	11.10.2020 to 17.10.2020
4. Energy Conservation Act	Online class- 17.10.2020 (14:00 hrs to 18:00 hrs)
<i>Module: A- Assessment</i>	<i>17.10.2020</i>
Module B: Energy Performance of Industrial Utilities- Part-1 (2 Weeks)	18.10.2020 to 31.10.2020
Week 3	
1. Industrial Energy Sources & Conversion	18.10.2020 to 24.10.2020
2. Boiler & Furnace	Online class- 24.10.2020 (14:00 hrs to 18:00 hrs)
Week 4	
3. Steam and process heating	25.10.2020 to 31.10.2020
4. Heat Exchanger	Online class- 31.10.2020 (14:00 hrs to 18:00 hrs)
5. Air conditioning and refrigeration	
<i>Module: B -Assessment</i>	<i>31.10.2020</i>

Modules	Date and Time
Module C: Energy Performance of Industrial Utilities- Part-2 (2 Weeks)	01.11.2020 to 14.11.2020
Week 5	
1. Plant Electrical Distribution System	01.11.2020 to 07.11.2020
2. Motors and drives	Online class- 07.11.2020 (14:00 hrs to 18:00 hrs)
3. Compressed Air System	
Week 6	
4. Industrial Fans	08.11.2020 to 14.11.2020
5. Pumping System	Online class- 14.11.2020 (14:00 hrs to 18:00 hrs)
6. Industrial Lighting	
Module: C -Assessment	14.11.2020
Module D: Energy Performance assessment tools (2 Week)	15.11.2020 to 27.11.2020
Week 7	
1. Energy Efficiency Data Analytics	15.11.2020 to 21.11.2020
2. Measurement & Verification of Energy Performance	Online class- 21.11.2020 (14:00 hrs to 18:00 hrs)
Week 8	
3. Energy Management System Certification	22.11.2020 to 27.11.2020
4. Behavioral Energy Efficiency	Online class- 27.11.2020 (14:00 hrs to 18:00 hrs)
Module: D -Assessment	27.11.2020
PROGRAM CLOUSER	27.11.2020

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