



An Intensive 5-Day Online Training Course

Fundamentals of Renewable Energy

Types, Advantages & Operations

PROGRAMME SUMMARY

This innovative EuroMaTech online training course on Fundamentals of Renewable Energy will create awareness to delegates on the availability of the different types of renewable energy. The online training course will then allow them to choose the options of the various kinds of renewable energy generation which they can apply it to their electrical installation thus promoting the reduction of the carbon footprint.

Date	Venue	Fee(\$)
17 - 21 Oct 2021	Live / Online	US\$ 2,400

INTRODUCTION

Renewable energy technologies are clean sources of energy that have a much lower environmental impact than conventional energy technologies. Electricity generation is the leading cause of industrial air pollution in the world. Most of our electricity comes from coal, nuclear, and other non-renewable power plants. Producing energy from these resources takes a severe toll on our environment, polluting our air, land, and water.

EuroMaTech introduced Fundamentals of Renewable Energy online training course to be in coherence with world's concerns about climate changes and reduction of carbon footprint. The online training course will explore the various new technologies, construction, merits and demerits of each type of renewable energy generation. This online training course will also consider methods of integration between the renewable energy with the present grid system. State-of-the-art distributed energy systems and storage systems will be emphasised to meet the ever growing demands of electricity.

Participants attending the Fundamentals of Renewable Energy online training course will develop the following competencies:

- Understand the difference between renewable and non-renewable energies
- Create awareness in understanding the types of renewable energy
- Will appreciate the benefits of harvesting renewable energy
- Understand the characteristics and operations of each type of renewable energy
- Become aware of the importance of renewable energy generation

Classroom
 learning service
 available



TRAINING METHODOLOGY

The goals of each participant are discussed to ensure their needs are fulfilled, as far as possible. Questions are encouraged throughout, particularly at the daily wrap up sessions. This provides opportunities for participants to discuss specific issues and, if possible, find appropriate solutions. Case studies are employed to highlight particular points and appropriate video materials used to illustrate particular conditions.

In-house Training

EuroMaTech is capable of conducting this training programme exclusively for your delegates. Please e-mail us on inhouse@euromatech.ae for further information and/or to receive a comprehensive proposal.



Training Seminars & Conferences
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WHO SHOULD ATTEND

The Fundamentals of Renewable Energy online training course will enable technicians and engineers to understand the future of generation of electricity using renewable energy. This online training course is suitable to a wide range of professionals, but will greatly benefit:

- Electrical Engineers
- Maintenance Technicians
- Management Professionals
- Project Engineers
- Transmission Engineers
- Power Generation Engineers

PROGRAMME OBJECTIVES

EuroMaTech's Fundamentals of Renewable energy online training course aims to assist and achieve the following objectives:

- Understand the fundamentals of the conventional power generation, transmission and distribution systems
- Understand the importance and roles of renewable energy in this modern age
- How to maximise the natural resources and convert them into renewable energy
- Understand the components architecture between the solar and wind power generations
- Create awareness in understanding the types of renewable energy
- Appreciation the benefits of harvesting renewable energy
- Understand the characteristics and operations of each type of renewable energy
- Explore the suitability of introducing renewable energy generation to your premises

QUALITY CERTIFICATIONS & ACCREDITATIONS



The PMI® Registered Education Provider logo is a registered mark of the Project Management Institute, Inc.

COURSE OUTLINE



Day 1

Renewable Energy and the World Today

- Fundamentals of Electricity Generation and Transmission
- Conventional Methods of Power Generation
- Overhead and Underground Power Transmission
- The AC power Distribution System
- The Smart Grid
- The Micro Grid

Day 2

Types and Characteristics of Renewable Energy & Generation of the Solar Energy

- Overview of renewable energy available
- Merits of Solar Power Generation
- Characteristics of a Solar Panel Installation
- Types of Photo Voltaic Cell
- The Inverter and Smart Meter
- Operation of the Solar Parks

Day 3

The Wind Power, Construction and Operation of Wind Turbines

- Overview of Wind Power Generation of Electricity
- Construction of the Wind Turbines
- Operations and characteristics of the main components of the Wind Turbine
- Merits of Wind Power
- Rotor Blade Designs
- Onshore and Off shore Wind Farms

Day 4

Bioenergy, Tidal and Hybrid Renewable Energy Systems

- Characteristics of Biomass Power Generation
- Operations and Components of a Biomass Renewable Energy
- Characteristics of a Tidal Wave Energy Generation
- Operations of the Tidal Wave Renewable Energy
- Operations of Hybrid Renewable Energy Systems
- Merits of Hybrid Renewable Energy Systems

Day 5

The Distributed Energy Resources (DER) and Storage System

- Importance of distributed Energy Resources
- Integration of renewable energy to the grid
- Energy Storage Systems
- Larger Capacity Batteries
- Case Studies, Selection and Design
- Q&A and Wrap-up Session

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Date

17 - 21 Oct 2021

Venue

Live / Online

Fee(\$)

US\$ 2,400

All Fees are subject to 5% Value Added Tax (VAT).*

Your Details

Name (Mr/Ms):.....

Position:..... Organisation:.....

Address:.....

City / Country:

Telephone: Email:

Mode Of Payment

Please find enclosed a cheque made payable to EuroMaTech

Please invoice me

Please invoice my company as follows:

Contact Name:

Company Name:

Address:.....

Email:

Documentation

High Quality material has been prepared by the Seminar Leader for distribution to delegates.

Certificates

A Certificate of Completion will be issued to those who attend & successfully complete the programme.

Registration & Payment

Please complete the registration form on this page & return it to us indicating your preferred mode of payment.

For Further Information, email us at info@euromatech.ae.

Cancellation Policy

Request for seminar cancellation must be made in writing & received at EuroMaTech three weeks prior to the seminar date. A U.S.\$250/- processing fee will be charged per delegate for each cancellation. Thereafter, we regret that we are unable to refund any fees due, although in such cases we would be happy to welcome a colleague who would substitute for you.

Disclaimer

EuroMaTech reserves the right to alter the content, location of the Seminar, or the identity of the speakers in case of events beyond our control.

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