



Electrical Engineering

Energy Transition

Course Introduction

One of the greatest challenges of the future is the finding the solution to determinants of energy demand through sustainable generation and use of energy. Providing a reliable supply of affordable, safe and clean energy requires answering complex and significant technical, social, political, economic, legal and ethical questions, which appear often in combination, to ensure sustainable energy supply, use and development.

Energy Transition

This Energy Transition and Innovation training course is designed to build capacity through the development of new knowledge, new understanding and new insights, and can therefore provide effective solutions to complex problems in the energy of the future.

Target Audience

- Researchers and Practitioners in the field of Energy
- Professionals in Applied Sciences
- Technology Engineers, CTOs, and CIOs
- Strategic Development Personnel
- Project Managers

Learning Objectives

- Identify the sources of energy and their contributions and issues
- Learn how to build a path towards sustainable future
- Acquire the knowledge needed to implement the renewable energy projects
- Learn the models of energy consumption

- Adopt the improvement of energy production without the need for extensive investment
- Use the energy production and consumption analytics for energy distribution planning

Course Outline

• DAY 01

Introduction to the Energy Industry

- Oil the energy of today-yes it still is
- Natural gas-the clean energy pioneer
- Coal-the energy and economics
- Electricity-the energy for all
- Energy market efficiency

• Day 02

Energy Transition

- Efficiency in industry sector
- Efficiency in living environment sector
- Efficiency in transportation sector
- Strategy of fuel transition
- What the future brings?

• Day 03

Renewable Sources of Energy

- Wastes in electric energy production
- Solar energy
- Wind energy
- Geothermal energy
- Biomass energy

- Hydropower energy

• Day 04

Innovation in Energy Sector

- Blockchain in energy distribution sector
- Energy storage facilities
- Microgrids and artificial intelligence
- Energy management
- The reduction in carbon footprint

• Day 05

Energy Efficient Buildings and Livable Space

- Energy flow in buildings
- Building energy performance
- Digital twin of buildings and livable space
- Digital twin of energy system
- Design of the energy efficient city

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 23, 2025	June 27, 2025	5 days	4250.00 \$	UAE - Dubai
Sept. 8, 2025	Sept. 12, 2025	5 days	4250.00 \$	UAE - Abu Dhabi
Dec. 1, 2025	Dec. 5, 2025	5 days	4950.00 \$	Netherlands - Amsterdam