



CAS ETH in Applied Technology in Energy

Providing managers with energy technology
qualifications for leadership positions

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Target audience

Managers with limited technical background and a minimum of five years working experience in a relevant industry, including managers working in finance, marketing, strategy and other non-technical departments.

Objectives

The CAS ETH ATE is designed to provide managers with a deeper knowledge in the rapidly evolving world of energy and electrification. Reducing carbon emissions to net zero by 2050 will require a radical shift towards renewable energies – a transition that will bring new challenges such as volatility in power generation. The CAS will help participants to better understand the ongoing «Energy Revolution» and enable them to shape the energy future of their company and industry.

Modules

1. Energy fundamentals

Participants learn how today's energy system (including energy generation, distribution and consumption) functions and will understand the underlying scientific principles, technologies as well as the regulatory framework.

2. Energy storage

This module takes a deeper look at the most important technologies for electrical energy storage used by industry, with an emphasis on batteries.

3. Electric power grid systems

This module focuses on the technical operation and management of traditional power grid systems. Future grid technology and systems from both an operator's and end user's perspective will be explored.

4. Electrification and practical applications

Practical implications of the energy transition taking place in industry, including electrification technology and their practical application in multiple industries.

Structure and format

4 modules over 14 weeks from April to July, 2-day blocks every other week. Block format or blended learning. Workload is approximately 300 hours. 12 ECTS credits.

Admission requirements

A Master's level university degree recognised by ETH Zurich and several years of professional experience.

- › Tuition language: English
- › Start: Every Spring Semester
- › Application: 30 November–15 March
- › Programme fee: CHF 8,500
- › Programme Director(s):
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Professor Ulrike Grossner, D-ITET

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