



## **CAS ETH Applied Technology in Energy**

A new programme providing managers with energy technology qualifications for leadership positions

# CAS ETH ATE

## Certificate of Advanced Studies ETH Applied Technology in Energy

### Target Audience

The programme is intended for professionals who

- have management experience or background
- work in industries with energy and electrification challenges
- would like to broaden their knowledge in the field of electrification and energy related technologies

### Programme

The CAS ATE is designed to provide a targeted education in the rapidly evolving world of energy and electrification. Participants will learn how energy supply and use is changing from a science and technology perspective. Emphasis is given to technology applications that impact many industries and types of products.

### Modules

#### 1. Energy Fundamentals

The module provides an introduction to the fundamental science and underlying technology used throughout the rest of the CAS.

#### 2. Energy Storage

This module will take a deeper look at the most important technologies for electrical energy storage used by industry, with an emphasis on batteries. Participants will be introduced to the energy storage technologies in use in industry as well as technology- and market-driven opportunities for change and new applications.





### 3. Electric Power Grid Systems

Participants will learn about the technical operation and management of traditional power grid systems. The opportunities for and barriers to future grid technology and systems from both an operator's and end user's perspective will be explored.

### 4. Electrification and Practical Applications

The focus of this module is on understanding electrification technology and their practical application in multiple industries. This course takes a case study approach to look at how electrification is currently impacting products and technology use in manufacturing, electronics, automotive/transport, building construction and facilities management.

### Organization

Participants complete 4 modules over 14 weeks from April to July. Classes are generally conducted in either a block format or blended learning format to minimize time away from work. Workload is approximately 300 hours and successful graduates earn a total of 12 ECTS credits.

### Admission Requirements

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

#### Study

**Language:** 100% English

**Format:** 2-day blocks every other week

**Start:** Every April

**Cost:** 8'500 CHF

**Application:** October 1 – February 28

**Information:** [www.mas-at.ethz.ch/cas-programs/cas3a](http://www.mas-at.ethz.ch/cas-programs/cas3a)

## Contact

### CAS ETH Applied Technology in Energy

Host Departments: Information Technology &  
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Energy Science Center (ESC)

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