EE-466  

**Energy storage systems**  
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**Summary**
The course will bring the major elements on energy storage, principles and physical means.

**Content**
Fundamentals of energy storage, Ragone representation, energy density, power density.  
Electrochemical storage components  
Supercapacitors  
Hydraulic storage  
Flywheels  
Compressed air energy storage  
Transportation, mobile applications  
Power electronics and grid connected systems

**Learning Prerequisites**
**Required courses**
Energy conversion  
Power electronics

**Learning Outcomes**
By the end of the course, the student must be able to:
- Understand the techniques of energy storage
- Designe correctly a storage system regarding power demand, energy content, energy efficiency

**Assessment methods**
Written exam