Abstract

Nowadays, the availability of renewable and innovative energy sources along with the standard thermal ones makes the bidirectional energy flow between the grid and distributed sources a key concept, thus requiring a smarter control (Smart Grid). In this respect, the course aims at giving a general overview of systems and devices, characterizing the smart grid, as well as an insight on models, algorithms and strategies for the optimal distribution of energy resources. This issue is of very current interest and in evolution, thanks to recent enabling technologies (IoT approach, cloud data, novel control strategies). On the other hand, however, all these topics are not yet fully considered in engineering curricula, so that the proposed Course aims at bridging the gap. The approach must include, as a primary goal, such relevant issues as a safe energy provision and environment sustainability, also asking for a systematic use of economic issues implied with the energy market. Therefore, the course covers a large spectrum of disciplines, asking for a coordinated approach and merging different skills covered in this proposal by expert speakers.

The course is mainly addressed to a broad audience including PhD students and young researcher, but also professional engineers operating in the industry area.

Organizing Committee
Francesco Benzi (Chair)
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A new communication will follow with the link to the School registration form