University Specialist on Thermal Energy Storage for Industrial Applications

COURSE 2018-2019 PRE-REGISTRATION 01/10/18 fins al 15/01/19 REGISTRATION PERIOD 15/01/19 fins al 31/01/19 TUITION 1200 €

The standard registration fee is 1200 ?, and it applies to student from any European country. For non-European countries, the registration fee will be 2400 ?.

ACADEMIC DEGREES EXPEDITION

The current rate will be applied at the time of issue of the title

MAXIMUM OF STUDENTS

0

TYPE Especialista universitari CATEGORY Energy CREDITS 20 ECTS TRAINING MODALITY No presencial

COORDINATION

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ORGANIZATION

Centre de Formació Contínua UdL C/Jaume II, 71 Campus de Cappont 25001 - Lleida

PRESENTATION

This course is offered jointly by the University of Lleida and the University of Barcelona, and coordinated by the University of Lleida. It consists of a total of 20 ECTS that deal with the implementation of TES systems in large-scale and industrial applications. Specifically, the use of TES in energy intensive industry, in concentrated solar power plants and in district heating and cooling is explained. The most recent developments in the topic are also presented, both at the material and system levels. Some of the most relevant real examples of research done at pilot plant and demo scale are explained and analysed. Moreover, knowledge on numerical simulation tools that are relevant for the sizing of thermal components and systems are provided. The economic and environmental aspects related to the use of TES in industry are also explained. Finally, the course also consists in carrying out a project related to the knowledge acquired in the different subjects.

This course is addressed to people who have a technical background on mathematics, physics, and chemistry, not only from academia, but also for those already working at industry, and who would like to deepen their knowledge on this topic. The lecturers of this course are academics and researchers from top European universities, all of them being part of the EU H2020 INPATH-TES project (www.inpathtes.eu). The course is prepared to be 100% online, using high standard learning materials developed within the INPATH-TES online platform.

SCHEDULE

Specialisation on TES for industrial applications

- Integration of TES in industrial and large facilities
- Recent research progress and promising scientific directions
- Experimental demonstration and field performance of TES in large-scale applications
- Simulation of TES in large-scale applications
- TES for industrial applications: environmental and economic aspects
- DATES AND HOURS

There will be no schedule for teaching, but there will be a schedule dedicated to tutorship from February to May: 2 days per week in the morning (2 hours), 2 days per week in the afternoon (2 hours), and 1 Saturday per month in the morning.

LECTURERS

Dr. Anna Laura Pisello Dr. Camila Barreneche Dr. Diana Bajare Dr. Mercè Segarra Prof. Luisa F. Cabeza Prof. Michel de Paepe Prof. Xavier Py

OTHER INFORMATION

ADMISSION REQUIREMENTS

The students need to have a finished technical high school studies, and have a good background on mathematics, physics, and chemistry.

TEACHING PERIOD

Fecha inicio 01/02/19 - Fecha finalización 31/05/19 DATES AND HOURS

Since this is an online course, there will be no schedule for teaching. There will be a schedule dedicated to tutorship: 2 days per week in the morning (2 hours), 2 days per week in the afternoon (2 hours), and 1 Saturday per month in the morning. Each lecturer will inform the students on his/her own schedule for tutorship.

COMPLEMENTARY INFORMATION

CV_lecturers_Specialist_TES_Industry.pdf