

THE NATIONAL CONFERENCE ON APPLIED ELECTRICAL ENGINEERING IN ENERGY SECURITY AND SUSTAINABILITY NCAE^{3}S^{2}2026

12-14 December 2026; Boumerdes, Algeria

https://nceeess-2026.univ-boumerdes.dz/

Signals & Systems Laboratory LSS
Institute of Electrical and Electronic Engineering
University of Boumerdes

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Refer to the conference website

Call for papers

The rapid grow for electrification, the incorporation of fluctuating renewable energy sources, and the increasing cyber-physical threats all contribute to energy security. Electrical engineers started using the proliferating AI tools to control grid stability without human intervention, decreasing excess loads, as renewable energy sources are expected to surpass fossil fuel as the world's leading source of electricity. Additionally, localized flexibility is being improved by the shift to a decentralized architecture that makes use of Microgrids and Distributed Energy Resources (DERs), enabling towns to function as "energy islands" during broader grid stress. The critical shield required to stabilize these occasional sources is provided by the combination of solid-state and flow batteries. Finally, engineering rigor is moving toward "security-by-design," incorporating multi-layered protection to counter the increasing frequency of industrial cyberattacks, as power systems depend more and more on interconnected digital layers.

Applied Electrical Engineering for Energy Security is a multidisciplinary conference focused on how modern electrical engineering solutions can strengthen the reliability, resilience, and sustainability of energy systems. The conference brings together students, researchers, engineers, educators, and industry professionals to discuss practical innovations that protect energy infrastructure, improve power system stability, and support secure energy access in a rapidly changing world. The event emphasizes applied research, real-world case studies, and emerging technologies that address challenges such as grid reliability, renewable energy integration, energy storage, system protection, and smart power networks. This aim is to present how the main lines of defense against systemic vulnerabilities is applied electrical engineering. Grid autonomy, enhanced storage, and cyber-physical protection are among the main engineering interventions. Through keynote talks, technical sessions, and panel discussions, participants will explore how electrical engineering plays a critical role in ensuring safe, affordable, and secure energy for communities and industries.

Topics of interest include, but not limited to:

Track 1: Control Systems Engineering
Track 2: Power Engineering
Track 3: Telecommunications and Data Processing
Track 4: Computer Engineering and applications

For more details, please refer to the conference webpage.

Paper Submission

Authors are invited to prepare an up-to-three-page extended abstract using the abstract template available in the conference website. English is the official language of the conference. Authors can submit their abstracts through the CMT submission system at:

https://cmt3.research.microsoft.com/NCEEESS2026

After the conference, the authors of presented works will be contacted to submit full papers to some indexed journals.

Important dates

Abstract submission deadline: September 30, 2026
Notification to authors: October 15, 2026
Conference dates: 12-14 December, 2026.

Registration:

At least one author must register for the submission to be included in the conference proceedings.

Contact Information: ncaeeess2026@gmail.com