

The **2025 IFAC Workshop on Smart Energy Systems for Efficient and Sustainable Smart Grids and Smart Cities – SENSYS 2025**, will take place in Bari, Italy, from June 18 to June 20, 2025.

Hosted under the auspices of the **International Federation of Automatic Control – IFAC**, this workshop will explore advanced decision and control techniques and applications within smart energy systems to enhance the efficiency and sustainability of infrastructures, ecosystems, and urban areas of the future. Attendees will benefit from a rich program featuring technical sessions, keynote lectures, and opportunities for networking with leading experts, industry professionals, and policy-makers.

We invite submissions for Open Invited Track, Regular Contributions, Discussion Contributions and Dissemination Contributions that align with the workshop's topics.

The proceedings are published online in partnership with Elsevier in the open access journal **IFAC-PapersOnLine**. Each paper is uniquely identified by a DOI (Digital Object Identifier), the current standard for electronic papers citation. IFAC-PapersOnLine is indexed by Scopus, the Web of Science (WoS), and Google Scholar.

We look forward to welcoming you to Bari, Italy!

#### Main IFAC sponsoring Technical Committees

- TC 6.3. Power and Energy Systems

#### IFAC Co-sponsoring Technical Committees

- TC 8.3. Modelling and Control of Environmental Systems
- TC 9.3. Control for Smart Cities

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#### Topics

Workshop topics include but are not limited to:

**Decision and control techniques**  
 Distributed and decentralized control and management  
 Intelligent control in smart grid  
 Wide-area monitoring and control  
 Virtual power plants  
 Design of energy markets for smart grid  
 Fault detection, supervision, and safety  
 Modelling and control of prosumer resources  
 Smart design and control of energy storage systems  
 Artificial Intelligence in control systems  
 Non-linear dynamic modeling  
 Multi-objective and multi-criteria optimization  
 Agent-based and participatory modeling  
 Integrated assessment modeling  
 Uncertainty management  
 Decision support systems

#### Application fields

Smart grids  
 Smart districts and buildings  
 Smart cities  
 Energy communities  
 Green hydrogen  
 Renewable energy  
 Sustainable development  
 Resource management (water, atmosphere, and land)  
 Biotechnological systems  
 Environmental systems and energy nexus  
 Natural risk management (floods, forest fires, hurricanes, earthquakes, etc.)  
 Power electronics & energy conversion  
 Electrical machines & industrial drives  
 Smart mobility & transportation electrification  
 Electronic system on chip & real-time embedded control  
 Industrial processes & manufacturing

## Deadlines and Other Dates

**15 January 2025** – Open Invited Track submission deadline  
**15 February 2025** – Regular Paper initial submission deadline  
**15 March 2025** – Discussion and Dissemination contributions submission deadline  
**31 March 2025** – Acceptance notification  
**15 April 2025** – Final submission deadline  
**30 April 2025** – Early registration rate expires  
**1 June 2025** – Normal registration rate expires  
**18 June 2025** – Late registration rate expires  
**18-20 June 2025** – Workshop dates



Politecnico  
di Bari

Workshop Website

<https://conferences.ifac-control.org/sensys2025>