

Workshop on Jupyter Notebooks for Power Electronics

Workshop Details

Jupyter Notebooks are open-source, Python-based tools for interactive learning, visualization, and engineering computation.

Session I: Jupyter Notebooks for Electrical Engineering

- Introduction to Jupyter Notebooks
- Electrical Engineering notebook demonstrations
- Teaching applications:
 - Homework and assignments
 - Classroom demonstrations
 - Examination questions
 - Self-paced learning

Session II: Hands-on Power Electronics

- Power electronics numerical examples
- Analytical design calculations
- Verification using Jupyter Notebooks
- Individual or two-person hands-on exercises

Who Should Attend?

- College teachers with a Power Electronics background
- Faculty interested in using Jupyter Notebooks for teaching
- No prior Python or Jupyter experience required

Hands-on Requirements

- Bring your own laptop.
- Install Python and Jupyter Notebook before the workshop.
- For Windows users, installing **Anaconda** is recommended.

Preparation Resources

Installation Instructions

https://www.ee.iitb.ac.in/~sequel/nb_gseim.html

Sample Jupyter Notebooks

https://www.ee.iitb.ac.in/~sequel/nb_list.html

Several notebooks from the above collection will be demonstrated during the workshop.

Instructors

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