

**The University of Seville
Power Electronics Group**

The Power Electronics Group (PEG) is a Research Laboratory that belongs to the Electronic Technology Group (GTE) of the University of Seville (Spain). The PEG is an international research centre for power electronics and industrial applications. The Group is formed by around 8 academic staff, 4 post-doctoral and PhD researchers, and a grant portfolio of €3M. Its strategy focuses on the energy and transportation sectors with an important activity in the renewable energy fields. The activities range from basic technology research to applied research, culminating with industrial prototypes development.

Our main R+D topics are:

- Power Converter Topologies and Control
- Power Electronics for the Integration of Renewable Energy Systems
- Grid codes requirements
- Energy Storage Systems: Last generation batteries, supercapacitors, flywheels
- Transmission, Distribution and Micro-Grid Power Electronics (HVDC, FACTS)
- Power Electronics for Electrical and Hybrid Vehicles Transportation Systems
- Aerospace Applications



We can highlight facilities such as:

- Wind Power Test Bench
- Photovoltaic Inverters Test Bench
- Fuel Cell Conditioning Test Bench
- Flywheel Test Bench
- New Technology Batteries
- FACTS. Test Bench (UPFC, STATCOM, Active Filter)
- HVDC IGBT based (1MW on schedule)
- Several Multilevel Converters (NPC, Cascade, Multiphase)

