University of Stuttgart
Germany

SUPER – Stuttgart University Program for Experiencing Research
Project Information

Institute's Information

Name of Institute	Institute of Electrical Energy Conversion (IEW)
Contact Person	Daniel Fritz
Phone	+49 711 685 67831
e-mail	daniel.fritz@iew.uni-stuttgart.de

Duration of Project/Number of Students

June/July	
June/July/August	>= 2.5 months
Number of Students	1

Name of Project	Design and measurement of a wireless power transfer system in various power classes.

Beneficial Skills & Knowledge

- Background in electrical engineering, power electronics
- Working in the lab with measurement devices like Oscilloscopes etc.
- First experiences with PCB – Design and manufacturing of PCBs

Description of Work

In addition to electrical machines, the IEW has various research topics, one of the most interesting areas being wireless power transmission (WPT). In this area, the focus is on the design of power electronics and coils, the optimization of the overall system (electrical and magnetic) and the electrical simulation of WPT systems.
This project concentrates on the construction of a WPT system. In addition, the system is to be examined and measured at various operating points. Challenging aspects such as the mismatching of the coils must be investigated and different load conditions must also be analyzed. The measurement data is then evaluated and documented.
If you are interested in power electronics, magnetic coils and working in the laboratory, you are warmly invited to support us and develop new technologies for the electromobility of the future.