

Knowledge Network of Indian Institute of Technology Gandhinagar Under TEQIP-II Initiative

Summer School on Power Electronics

The summer school on Power Electronics comprises of approximately 40 hours of instruction and 30 hours of hands-on sessions in problem solving and lab experiments. This course provides a basic understanding of the power electronic converters used in different applications.

This summer school provides an opportunity for the faculty members and students to revisit the important fundamental concepts. Participation in this summer school is invited through registration.

Topics to be discussed:

Need for regulating the power to loads; Semiconductor devices as switches; Rectifier; Inverter; Chopper; Role of power electronics in drives – Electronically commutated motor; synchronous reluctance motor and switched reluctance motor; Role of power electronics in power system – Wind energy conversion system; Solar energy conversion system.

Note: Usually theory would be delivered in the forenoon sessions. Suitable demonstration, simulation and tutorial sessions would be in the afternoon sessions.

Presenters: Instructors:

- 1. Dr. Ragavan K
- 2. Prof. S. Rajendran