



POWER ELECTRONICS

1. SWAYAM Prabha Course Code - E13

PROFESSOR'S NAME	Prof. G. Bhuvaneshwari	
DEPARTMENT	Electrical and Electronics Engineering	
INSTITUTE	Indian Institute of Technology, Kharagpur	
COURSE OUTLINE	Besides course outline, it should also indicate if there are any pre-requisites (i.e, prior knowledge) required .	
	The course discusses power processing electronic circuits like rectifiers, AC voltage controllers, Frequency converters, DC-DC converters and inverters apart from introducing the basics of power semiconductor devices like SCRs, power BJTs, IGBTs and MOSFETs. The analysis of these power circuits are presented in detail along with the waveforms and control techniques. Finally, applications of power electronic technology in generation sector, transmission sector and also in day-to-day applications like battery charger, motor drives, power supplies are described.	
COURSE DETAILS		
S. No	Module ID/ Lecture ID	Lecture Title/Topic
1	L1	Introduction to Power Electronics
2	L2	Power Devices
3	L3	Diodes and SCR
4	L4	Power Devices

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References if Any: