Course Type	Course Code	Name of the Course	L	T	P	Credits
DP	NEEC516	Advanced Power Electronics Lab	0	0	3	1.5

Course Objective

- The objective of this lab is to introduce postgraduate students to the practical aspects of advanced power electronics.

Learning Outcomes

Upon successful completion of this course, students will develop:

- an ability to deal with advanced power electronics aspects.
- an idea about the working of different advanced power electronics concepts.

Unit No.	Topics to be Covered	Contact Hours	Learning Outcome
1	Experiments on power electronic converters	2x4	Students will learn working of power electronic converters
2	Experiment on design of high frequency magnetic inductors	2x4	Students will learn design of high frequency magnetic inductors
3	Experiment on design of high frequency magnetic coupled inductors	2x4	Students will learn design of high frequency magnetic coupled inductors
4	Experiment on design of high frequency magnetic transformers	2x3	Students will learn design of high frequency magnetic transformers
5	Experiments on generation of various PWM techniques	2x3	Students will learn working of various PWM techniques
6	Practice and review	6	------
	Total Contact Hours	**42**	

Text Books:

1. Power Electronics Converters, Application and Designî - Mohan N. Undeland. T & Robbins W John (Wiley), 3 rd edition, 2002
2. Power Electronics Essentials & Applications, L. Umanand (J Wiley)

Reference Books:

1. High-Power Converters and AC Drives-By Bin Wu, IEEE PRESS
2. Pulse Width Modulation-by for Power Converters-By D. Grahame Holmes, Thomas A. Lipo, IEEE PRESS.