



E6212 JAN 3:0

DESIGN AND CONTROL OF POWER CONVERTERS AND DRIVES

Instructor

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Teaching Assistant

Email:

Department: DESE

Course Time: MON-WED-FRI 12 TO 1

Lecture venue: DESE

Detailed Course Page:

Announcements

Brief description of the course

THE COURSE IS FOR POST GRADUATE STUDENTS WHO HAS BASIC B.TECH IN ELECTRICAL AND ELECTRONICS ENGINEERING AND ALSO FOR THOSE WANT TO SPECIALIZE IN POWER ELECTRONICS AND DRIVES.

Prerequisites

B.TECH IN ELECTRICAL AND ELECTRONICS ENGINEERING

Syllabus

BASICS OF CONTROLLED RECTIFICATION. AC TO DC CONVERTERS, DC MOTOR MODELING AND ITS CLOSED LOOP CONTROLLER DESIGN ,PWM TECHNIQUES, SINE-TRIANGLE, CURRENT HYSTERESIS CONTROLLERS AND SPACE VECTOR PWM, BASIC OF INVERTERS AND MULTILEVEL INVERTERS, CURRENT SOURCE INVERTER,INDUCTION MOTOR MODELING,V/F CONTROL AND VECTOR CONTROL TECHNIQUE

Course outcomes

MODELING, DESIGN AND CLOSED LOOP CONTROL OF VARIABLE SPEED DRIVES

Grading policy

ASSIGNMENT AND TESTS (TWO TEST PAPERS)-50%

FINAL EXAM-50%

Assignments

Resources

CLASSNOTES, NPTEL LECTURE, RESEARCH PAPERS AND

TEXT BOOKS PRESCRIBED DURING THE COURSE