

Department of Electronics & Communication Engineering

NPTEL Links

SEM: III ECE

Subject: EMEC

S no.	Topic	NPTEL Links
Section A: MAGNETIC CIRCUITS AND INDUCTION	Mutual inductance: Inductance: Magnetic field1: Magnetic field2: Field due to current law : Faraday's law :	http://nptel.ac.in/courses/108106073/26 http://nptel.ac.in/courses/108106073/25 http://nptel.ac.in/courses/108106073/18 http://nptel.ac.in/courses/108106073/19 http://nptel.ac.in/courses/108106073/22 http://nptel.ac.in/courses/108106073/27
Section B: DC Machines	Operating Principles of DC Machines: Constructional Features of DC Machines: Generated EMF and Torque in DC Machines: Armature Reaction: Commutation in DC Machines : Characteristics of DC Shunt Motors: Starting of DC Shunt Motors: Speed Control of DC Shunt Motors: Braking of DC Shunt Motors: Speed Control and of DC Series Motors: Testing of DC Series Motors: Characteristics of Compound DC Series Motors:	http://nptel.ac.in/courses/108105017/21 http://nptel.ac.in/courses/108105017/22 http://nptel.ac.in/courses/108105017/23 http://nptel.ac.in/courses/108105017/24 http://nptel.ac.in/courses/108105017/25 http://nptel.ac.in/courses/108105017/30 http://nptel.ac.in/courses/108105017/31 http://nptel.ac.in/courses/108105017/32 http://nptel.ac.in/courses/108105017/33 http://nptel.ac.in/courses/108105017/38 http://nptel.ac.in/courses/108105017/39 http://nptel.ac.in/courses/108105017/40
Section c: Synchronous Machine & Synchronous Motor	Introduction on Synchronous Machines: Synchronous Machine Armature Windings: Synchronous Generator Operation: Interconnected Synchronous Generators : Synchronous motors:	http://nptel.ac.in/courses/108106072/10 http://nptel.ac.in/courses/108106072/11 http://nptel.ac.in/courses/108106072/12 http://nptel.ac.in/courses/108106072/14 http://nptel.ac.in/courses/108106072/15
Section D: Three phase Transformer & Induction Machine	Introduction to Three Phase Transformer: Construction of Three Phase Transformers: Three Phase Transformer Connections: Operation of Three Phase Transformers: Analysis & Testing of Three Phase Transformers: Induction machines: Construction: Equivalent Circuit: Determination of Circuit Parameters:	http://nptel.ac.in/courses/108105017/10 http://nptel.ac.in/courses/108105017/11 http://nptel.ac.in/courses/108105017/12 http://nptel.ac.in/courses/108105017/16 http://nptel.ac.in/courses/108105017/15 http://nptel.ac.in/courses/108106072/1 http://nptel.ac.in/courses/108106072/4 http://nptel.ac.in/courses/108106072/5 http://nptel.ac.in/courses/108106072/6