Fundamentals of Electrical Engineering II

Course Code: 25093
Credits: 3
Course Type: Theoretical
Prerequisites: Fundamentals of Electrical Engineering I
Course Length: 51 hours

Outline:

1. Magnetics and Electromagnetics
2. Calculations of Magnetic Forces
3. Magnetic Circuits
4. Operation of DC Motors
5. DC Motors with Single, Series, Shunt and Compound Excitations
6. Single-Phase and Three-Phase Transformers
7. Auto-Transformers
8. Tap-Changer Transformers
9. Three-Phase Transformer Connections
10. Synchronous motors and Parallel Connection Synchronous Generators
11. Asynchronous (Induction)Motors with Squirrel-Cage and WoundRotors
12. Single Phase Motors with Split-Phase Capacitor Start
13. Universal Motors
14. Magnet and Reluctance Motors

References:

William H. Hayt& Jack E. Kemmerly,"Engineering Circuit Analysis – 7th Ed." McGraw-Hill Book Company Inc.