

Course Schedule

Topic 1: Magnetic materials and Circuits (S. Chapman, ch. 1)

Sections: 1.1, 1.2, 1.4-7, 1.8 (can be moved to DC machine), 1.9 with emphasis on three phase systems,

Topic 2 - Transformers & its performance (S. Chapman, ch. 2)

Sections: 2.1-10, 2-12(inrush current), 2.13

Topic 3- Fundamentals of AC Machines steady state operation (S. Chapman ch. 4)

Sections: 4.1-5

Topic 4- Synchronous Machines (S. Chapman ch. 5&6)

Sections: 5.1-7, 5.9(parallel with large power system pp301-304), 6.1-6(only Power factor correction)

Topic 5- Induction Machines (S. Chapman Chs 7)

Sections: 7.1-9, 7.11-13

Topic 6- DC Machines (S. Chapman ch. 8 &9)

Sections: 8.1-2, 8.4-8, 9.1-6, 9.8, 9.11, 9.12