



High Voltage Engineering Fundamentals : Part 2

Name of the PMRF student

Details of the content of the module

Soumyadeep Chowdhury

Required background of the students taught

Electrical Engineering, Electrical and

Electronics Engineering, Power Engineering

Module 1 : Basics of Electrical Insulation – Importance of insulation in electrical equipments, Different types of insulations available in electrical power equipments- solid, liquid gaseous and vacuum insulation

Module 2 : Breakdown of electrical insulation. Different mechanisms or theories behind the breakdown of insulation, Importance of studying breakdown theories. Breakdown of solid insulation- different mechanisms like treeing, tracking etc.

Module 3 : Breakdown of liquid insulation

Module 4 : Breakdown of gaseous insulation. Difference between flashover and puncture of insulation.

Module 5 : Techniques for measurement of High Voltages and High Currents

Module 6 : Some important topics in extra high voltage engineering viz. detection and measurement of audible noise level, and radio interference voltage (RIV).



Schedule of the module

Starting Date : 20th January 2024

End Date : 9th March 2024 (Tentative)

Total : 8 weeks , 2hours of lecture each week (1hr lecture + 1hr problems and doubt solving)

Module 1 : Week1 , Module 2 : Week 2 , Module 3 :

Week 3, Module 4 : Week 4 & 5, Module 5 : Week 6 & 7

Module 6 : Week 8

Meeting link : https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZjU3YjQ2NzMtMjY1NC00NjE3LTgzZjAtYzdmYTdjYTA2OGQ2%40thread.v2/0?context=%7b%22Tid%22%3a%226f15cd97-f6a7-41e3-b2c5-ad4193976476%22%2c%22Oid%22%3a%22bc67e6b9-e3ea-4cf7-babb-233d02430d15%22%7d

Contact email ID: issf.forum@gmail.com

Registration link: https://docs.google.com/forms/d/1Bj3SH-BK_8aKljvT5339WF4npWGtai-znhuW_NMJZtw/edit