

Graduation Design Project Proposal Form

Project #

Project Title Design and build chopping geometry for HV impulse generator
Professor(s) Name(s): Prof. A. Al-Arainy & Prof Y Khan
Number of Students: Two
Students Qualifications Students should have good background in High Voltage (preferable if they took EE 446)
Statement of Problem High Voltage transformer need protection from HV surges especially when they chopped in the tail. This project deals with the designing, building and testing a chopping geometry for lightning impulse used for transformer testing. This will need designing the geometry and its implementation and testing in the lab.
Brief Description of the Project The students are required to understand the need and applications of high voltage testing, and methods to design and build this geometry in the labs. Then they will build it in the HV lab and tested it on real transformer.
Objectives <ol style="list-style-type: none">(1) Understanding the theory behind the subject(2) Acquire the know how to do the complete design(3) Implementation of the proposed design of chopping geometry for HV impulse generator(4) Testing of the geomtry and to study its performance.
Technical Approach and Expected Deliverables <ul style="list-style-type: none">● Literature search of the project topics● Design of the chopping geometry for HV impulse generator● Construction of the geometry● Testing the geometry on real transformer● Report preparation