Electrical Power Engineering



By

Associate Prof. / Mohamed Ahmed Ebrahim Mohamed

Consultant of New and Renewable Energy Systems

E-mail: mohamedahmed_en@yahoo.com

mohamed.mohamed@feng.bu.edu.eg

Web site: http://bu.edu.eg/staff/mohamedmohamed033











Course Code: EPE 223

Study Hours: 4 Lect. + 2 Tut





J.S.

Final Exam: 67%.

Midterm: 20%.

Year Work & Quizzes: 13%.

Textbook:

Hadi Saadat, Power System Analysis

Syllabus

- Introduction.
- Fundamentals of electrical power engineering.
- A.C and D.C power transmission.
- A.C and D.C power distribution.
- Interconnections of power systems.
- Transmission and distribution system.
- Substations and circuit breakers.

Cont.

- Overhead lines.
- Cable Systems.
- Transformers.
- Connection of "green-energy" generation to power systems.
- Protection of individuals, equipment and power system installations.
- Protective devices and insulation co-ordination.
- Generation of high voltage systems.

Cont.

15

Natural Causes for over voltages.

16

Overvoltages and insulation coordination.

17

• Earthing system.





Mohamed Ahmed Ebrahím