

DR. AHMAD HARB

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SPCEET RESEARCH SEMINAR SERIES

IMPACT OF RENEWABLE ENERGY AND ENERGY STORAGE SYSTEMS ON POWER SYSTEMS STABILITY

DATE: WEDNESDAY, SEPTEMBER 24TH

TIME: 11:15 AM - 12:15 AM

LOCATION: Q 108

BIC

Dr. Ahmad Harb is a Professor of Electrical Engineering at the German Jordanian University (GJU). Dr. Harb was the Dean of Natural Resources Engineering at GJU (2011-2013). He is the founder and Editor-in-Chief for the International Journal of Modern Nonlinear Theory and Application, IJMNTA. His research interests include power system stability, renewable energy, energy storage, smart power grid, artificial intelligence (A.I.), machine learning, power electronics, modern nonlinear theory (Bifurcation and Chaos Theory).

ABSTRACT

In this talk, Dr. Harb will discuss the impacts of Renewable Energy Sources (RES) on the power system stability and give some solutions to avoid any kind of stability problems. Several practical scenarios will be presented, such as load disturbances, with and without Renewable Energy Sources (RES) and tie connection with Egypt. He studies the impacts of Energy Storage Systems (ESS), either static or dynamic, Static ESS (Battery Storage System, BSS), and dynamic (Hydro-Pump Storage Systems, HPSS).