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615 City Park Avenue New Orleans, Louisiana, 70119

INVITATION

S.H.P.E/IEEE Chapters at Delgado

*The ELET "Society of Engineering Technology Students",
and the IEEE Student Chapter.*

Formally invite you to:

Seminar on July 6, 2017 at 6:00 P.M., Bldg. CP-22, Lab #138.

Hosted by:

Mr. Dan L. Glaser P.E. ENTERGY-EMCC Relay Design

Sponsored by:

**ELET Department Head Professor Ramon E. Ariza P.E.,
Assisted by Mrs. Kendall Graham, ELET Student President.**

**The ELET Program is accredited by: *The Engineering Technology Accreditation Commission ABET
(ETAC of ABET) www.abet.org.***

"Explanation of how the power grid is protected when lines and equipment become short circuited."

Key Points that will be discussed by Mr. Glaser:

- Relay settings for transmission protection
- Protecting the power grid
- ETHICS in electrical engineering and workplace/college
- Similarities of water flow and electricity
- Electrical fundamentals (Ohm's Law)
- How electricity is delivered
- Electrical switch- small and big
- Circuit breakers- small and big
- Switches cannot always break electrical current
- Measuring and monitoring electricity
- Set points to define normal vs. abnormal electrical conditions
- Improper set points- failure to isolate trouble vs. unintended blackout
- Tool and techniques to protect the power grid
- Protection devices (electromechanical and microprocessor relays)
- Selective isolation of failure
- Overcurrent relay- current vs. time
- Differential relay- what goes in must come out
- Relay reach on R-X diagram (Ohm's Law for AC circuits)
- Engineering tolerance (% error margin)
- Line protection- reach zones and time delay
- Summary of power grid protection schemes