Region 3 – Educational Activities

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Region 3 Educational Activities Committee:

- **IEEE Region 3 Educational Activities Committee Objective**

- The Region 3 Educational Activities Committee (EAC) fosters continuing education, professional development and training opportunities for IEEE members in Region 3.

Region 3 Educational Activities Committee Responsibilities:

- Provide guidance and assistance to Region entities in organizing short courses and publicizing educational opportunities available from the Institute.
- Develop and utilize an infrastructure for rapid and effective communications between the membership and the Region 3 Educational Activities Committee.
- Promote educational activities at the member level and communicate to the Educational Activities Board (EAB) the educational concerns of the membership.
- Provide the Region 3 membership with current information regarding continuing education and professional development opportunities.

Region 3 Educational Activities Committee Responsibilities (cont):

- Promote Educational Activities awards.
- Support the Region 3 Professional Activities Operation Committee.
- Support Region Leadership Development Training in the training of EAC leaders.
- Provide pertinent and timely committee information to the Region 3 Newsletter Editor.
- Address other such tasks as may be assigned by the Region Delegate/Director.

IEEE Educational Activities Programs:

- **Pre-university resources**
- Teacher-In-Service Program
- EPICS in IEEE
- Educational Activities Portals
- Exhibits for Science Centers
- IEEE Low Cost Exhibits for Science Centers
- http://www.ieee.org/education_careers/education/education_resources.html

IEEE Teacher In Service Program (TISP):

- The ***IEEE Teacher In-Service Program (IEEE TISP)*** enables IEEE members to assist local pre-university school systems in the professional development of educators and raise the level of technological literacy of pre-university educators and students. Designed to enhance the teaching of science and math in the classroom, TISP features IEEE volunteers developing and presenting technologically oriented subject matter to educators in an "in-service" setting.
- **www.ieee.org/teacherinservice**

IEEE TISP Goals:

- Empower section volunteers to collaborate with their local pre-university community;
- Promote applied inquiry-based learning;
- Enhance the level of technical literacy of pre-university educators;
- Encourage pre-university students to pursue technical careers, including engineering;
- Increase the general level of technical literacy of pre-university students throughout their educational careers.

IEEE Sample Projects:

Category	Description	Ages
• Engineering Design • Properties Of Materials	**A Century of Plastics** Lesson focuses on how plastics of all sorts have been engineered in to everyday products over the past century, with emphasis on materials selection and engineering.	8 - 18
• Engineering Design • Mathematical Applications • Motion And Forces	**A Question of Balance** Lesson focuses on the use of weight scales and measurement by manufacturing engineers. Teams of students are posed with the challenge of developing a system to fill jars with a specific weight or count of products such as marbles or paperclips.	11 - 18
• Engineering Design	**Adaptive Device Design** Lesson focuses on the engineering of adaptive or assistive devices, such as prosthetic devices, wheelchairs, eyeglasses, grab bars, hearing aids, lifts, or braces.	8 - 18
• Electricity and Magnetism • Engineering Design • Technology	**Arduino Blink Challenge** Lesson explores computer programming and the impact of computers on society. Students build and test a program to turn a light on and off using an Arduino board. They connect the hardware, program the code, test their system, adapt it for variations in blinking times, evaluate their results, and share observations with their class.	14 - 18

https://www.ieee.org/education_careers/education/preuniversity/tispt/tispt_lesson.html

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IEEE TISP Facts:

- TISP 0riginated in Region 3 (Florida West Coast Section)
- TISP Database contains over 114 different projects.
- Database of projects is fully searchable.

IEEE Engineering Projects in Community Service (EPICS):

- The ***EPICS in IEEE*** is a program that organizes university and high school students to work on engineering, computing and technology related projects for local area humanitarian organizations.

- The program empowers Student Branches and IEEE Young Professional groups to work with high school students on community service-related projects to deliver technical solutions in the areas of *environment*, *access and abilities*, *education and/or human services.*

IEEE (EPICS) Will:

- Clearly demonstrate how engineering, computing and technology can benefit society by enabling community-based projects
- Increase high school student interest in engineering, computing or technology

- **To View the introductory eLearning module and hear more about EPICS:**
- **epicsinieee.ieee-elearning.org**

IEEE Educational Activities Portals:

- IEEE offers several free online educational resources related to IEEE's fields of interest for the pre-university community, university community, technical professionals and the general public.
- These resources provide career preparation information and lesson plans, information about degree program accreditation in engineering, computing and technology and resources that support technical standards education.

IEEE Educational Activities Portals:

- **Section leaders can use these resources for Section events!**

- ***TryEngineering.org*** www.tryengineering.org
- ***IEEE TryComputing.org*** www.trycomputing.org
- ***IEEE SPARK*** spark.ieee.org
- ***Accreditation.org*** accreditation.org
- ***TryStandards.org*** trystandards.org

IEEE Exhibits for Science Centers:

- **IEEE Exhibits for Science Centers** is a program to place exhibits in science and technology centers in locations around the world. These exhibits were developed by a group of volunteers consisting of IEEE members, science center personnel, industry, academia, and educators.
- In an informal education setting, these exhibits will illustrate fundamentals and applications of science, engineering, technology and computing, and will help create interest in science and engineering as a career path.

IEEE Exhibits for Science Centers - Objectives:

- Provide educational interactive experiences for pre-university students, ages 13 to 18 in IEEE's fields of interest.
- Help create interest in science and engineering as a career path.
- Develop exhibits at a low cost so that they may be easily replicated in Science and Technology Centers around the world.
- Contribute to awareness and understanding of electrical and computing technologies and their applications.
- www.ieee.org/education_careers/education/preuniversity/low_cost_exhibits.html

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Region 3 – Professional Development Hours for Professional Engineers

- Each State has different Rules and Regulations with regards to PE's registration.
- IEEE is a recognized provider in many states.
- PDHs can be provided for Meetings, Seminars, or Workshops.
- Providing PDHs is a great way for Sections and Chapters to raise funds.
- It is also a good way to show the value of IEEE membership.

Region 3 – PDHs - Alabama

- IEEE is a recognized provider (as are other Societies).
- State is moving to require 30 PDHs every two years.
- Sections are currently using meetings and workshops to provide PDHs.
- All PE's can utilize IEEE PDHs.

R3 PDHs – Florida West Coast Section

Power Transformer Overview

Last Chance to Earn Your PDH's For this Renewing Period

Date:	Thursday, February 26, 2015
Time:	Registration: 8:00 A.M. Seminar: 8:30 A.M. - 2:30 P.M.
Speaker:	Don Seay, P.E., General Electric
Location:	Seminole Electric Cooperative 16313 North Dale Mabry Hwy – Tampa, Florida
Cost:	$100 Members, $200 Non-Members, $25 IEEE Student Members
PDH Credits:	4 professional development hours will be awarded. Be sure to provide your name as it appears on your Florida license and your license number to insure proper credit. Florida Provider #0003849 I

R3 PDHs – Florida

Changes to Continuing Education Requirement For your P.E. License

Effective March 1, 2015, HB713 requires a total of **18 continuing education course hours every Two Years** in order for licensed professional engineers to renew their licenses.

Of the 18 hours, **one must be related to the laws and rules of professional engineers**, **one must relate to professional ethics**, and **four must relate to the licensee's area of practice**.

The remaining hours may correlate to any topic pertinent to the practice of engineering.

Four hours of the continuing education course hours may be obtained by being an officer for a Board recognized professional or technical engineering society.

R3 PDHs – Your State?

- What does your state require?
- What training opportunities does it present for your Section or Chapters?
- Would this be a benefit for your Section members?

Questions?