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**Florida West Coast
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Please Check the Website
Often for UPCOMING EVENTS
(Front Page Right Column)
<https://r3.ieee.org/fwc/>

The SunCoast Signal

The Institute of Electrical and Electronics Engineers, Inc.

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Next ExCom Meeting
Tuesday, January 4, 2022
Google Meet
Register with vTools

<https://events.vtools.ieee.org/m/295350>

PE Corner

Art Nordlinger, PE, Senior Member

The Steps to Professional Licensure, Part 2

In a recent column I discussed the beginning of the route to get your Professional Engineer license; taking the FE exam. This month I will focus on the next step, experience required and being an Engineering Intern (EI).

If an EI graduated with 4-year engineering degree, they must obtain 48 months of experience to qualify to apply to be a PE. The Florida Legislature recently changed the law such that an EI graduating with an approved Engineering Technology degree will need to complete 72 months of experience before being qualified to apply to be a PE.

What qualifies as experience? The type of employment considered acceptable must principally involve activities in the field of engineering as defined in *Section 471.005(7), F.S.* What qualifies as "experience" is found in *61G15-20.002, F.A.C. - Experience*. Some criteria considered for meeting the 48-month requirement includes:

Experience that logically follows and incorporates an application of the engineering education previously obtained.

Full-time experience obtained within 2 years of completing the engineering degree, that involves tasks and responsibilities consistent with the disciplines of engineering. Pre-graduation experience credit may be awarded at 50% of actual time, with total allowable credit for pre-graduation experience to not exceed 12 months.

Experience on engineering projects that is progressive in nature, indicating an increase in quality and involving greater responsibility.

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EXECUTIVE COMMITTEE (ExCom)****CHAIR:** Michael Mayor - michael.mayor@ieee.org (484) 524-326**VICE CHAIR:** Andrew Seely – andrew.seely@ieee.org
(813) 368-6002**SECRETARY:** Chung Seop Jeong, PhD; jeong@ieee.org**PAST CHAIR:** Paul Belussi; paul.belussi.us@ieee.org
(727) 418-5272**TREASURER:** Serge Beauzile, trea.fwcs.ieee@gmail.org
(516) 567-4888**SIGNAL EDITOR:** Michael Mayor, michael.mayor@ieee.org,
(484) 524-3264**AWARDS & BYLAWS:** Richard Beatie, PE, r.beatie@ieee.org
(813) 854-3948**MEMBERSHIP:** Andrew Lilly, andrew.lilly@ieee.org
(813) 853-4049**TEACHER IN-SERVICE:** Sean Denny, Venner20@ieee.org,
(727) 678-0183**CS/AESS Computer Systems/Aerospace & Electronic Systems,
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WIE WOMEN IN ENGINEERING Affinity Group: Chair Diana

Aristizabal, dianaaristizabal08@gmail.com

LIFE MEMBER Affinity Group: Chair Richard Beatie, PE,

r.beatie@ieee.org (813) 854-3948

YOUNG PROFESSIONALS: Chair TJ Ross, a.j.ross@ieee.org
(505) 620-7734**PACE:** Michael Mayor, michael.mayor@ieee.org**CONSULTANTS NETWORK:** Hermann Amaya,

hermann.amaya.us@ieee.org (727) 543-1308

SENIOR MEMBER COMMITTEE: Hermann Amaya,

hermann.amaya.us@ieee.org (727) 543-1308

STUDENT BRANCH MENTOR: Jacob Chacko,

jacobchacko@eaton.com

USF STUDENT BRANCH ADVISORS:Dr. Andrew Hoff, Student Branch Co-Advisor, hoff@usf.edu,
(813) 974-4958Dr. Chung Seop Jeong, Student Branch Co-Advisor,
jeong@usf.edu, (813) 974-6415Dr. Srinivas Katkooi, CS Chapter Advisor,
katkooi@mail.usf.edu

Dr. Jing Wang, MTT Chapter Advisor, jingw@usf.edu

Student Branch/Chapters:USF Student Branch, Chair: Noah Hamilton,
ieeefsfchair@gmail.comUSF Computer Society Chapter: Vishalini Laguduva Ramnath,
vishalini@mail.usf.eduUSF Microwave Theory & Techniques Chapter:
Enrique Gonzalez, enriquegonza@mail.usf.eduUSF Power & Energy / Industry Applications Chapter:
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(813) 425-2467**WEB MASTER:** TJ Ross, a.j.ross@ieee.org, (505) 620-7734**WEB PAGE:** <https://r3.ieee.org/fwc/>

Experience gained under the supervision of a licensed professional engineer.

Experience gained in engineering research and design projects by members of an engineering faculty where the program is approved by the Board.

Experience that includes demonstration of a knowledge of engineering, mathematics, physical and applied science, properties of materials, and the fundamental principles of engineering design.

Experience that includes demonstration of the application of engineering principles in the practical solution of engineering problems. Additionally, an applicant must list three (3) personal references who are professional engineers. These references cannot be the same individuals used to verify employment and experience.

To learn more about the examination and application process for the FE and PE exams go to the *Application Process* page under the *Licensure* section of FBPE's website at www.fbpe.org. If you have questions related to qualifying experience contact the Board office at (850) 521-0500 and ask to speak to someone in the *Licensure* department.

Next month I'll discuss the final step to licensure, the PE exam.

Whether you are a PE looking to attain required CEHs, or an engineer looking to learn something new or keep current with the latest trend in the profession, IEEE has seminars that will meet your needs.

THE SUNCOAST SIGNAL, published monthly by the Florida West Coast Section (FWCS) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). THE SUNCOAST SIGNAL is sent each month to members of the IEEE on Florida's West Coast Section. Annual subscription is included in the IEEE membership dues.

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All material for THE SUNCOAST SIGNAL is due in electronic form by the end of day of the 1st Monday after the 1st Tuesday of the month, i.e. the ExCom meeting, preceding the issue month. Address all correspondence to: Michael Mayor;

michael.mayor@ieee.org, (484) 524-3264

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Basics of Grounding, Modeling and Design Lunch and Learn

Date: Wednesday, February 9, 2022

Time: Webinar: 12:00PM – 1:00PM (EST/EDT)

Speaker: Biren Patel, PE, MBA, PMP – Biren Patel Engineering

Keith Wallace, PE - Director and Principal Engineer for Safearth Americas

Location: Online – meeting invitation will be emailed to attendees prior to seminar

Cost: Free

CEH Credits: No CEH's provided for this event. Florida provider #0003849.

RSVP: Online at: <https://events.vtools.ieee.org/m/294841>

Questions: Robert DeMelo - robert.demelo@ieee.org

Abstract: The Basics of Grounding Modeling and Design - lunch & learn - will go over the basics of grounding design for substations applications. The webinar will review what happens during a fault, the risk to personnel, what goes into a typical grounding model, and how to interpret the results. The lunch & learn will also introduce the various types of testing techniques to serve as inputs for grounding models as well as post installation verification of models and safe touch and step potentials. While this lunch & learn presentation isn't supposed to be a complete how-to guide to complete a design or test, it will introduce utility engineers about the grounding study process, and how to interpret the results of a grounding report, and help them understand the often underrated importance of testing.

Speakers:

Biren Patel, PE, MBA, PMP - Biren is a Substation Design Engineer with 16 years experience working on high voltage transmission substations for electric utilities. Biren graduated with a BSEE from Ga Tech in 2005 and an MBA from UGA in 2012. He is a PE in 15 states, a certified PMP, and an IEEE member since 2003. In 2011, he left his first substation engineering job at Burns & McDonnell to start the poorly named company, Biren Patel Engineering.

He, his wife, and two kids live in Macon, GA. According to his wife, the only reason he does these presentations is because he loves to hear himself talk and thinks he's a lot funnier than he really is.

Keith Wallace, PE - Director and Principal Engineer for Safearth Americas, a specialized electrical engineering company providing world-recognized expertise in safe power system grounding and lightning protection systems. Keith's professional history includes 28 years with Southern Company, having risen to the position of Principal Grounding Engineer. There, he developed programs for utility management of Substation Grounding, Temporary Protective Grounding, Lightning Protection, Arc Flash and Minimum Approach Distance, including implementation of training across multiple operating companies and staff at all levels. During his career he has been an industry leader in the field of power system grounding, live line work rules, and safety. He has led the industry having contributed to IEEE standards 80, 81, 1048, 516 and 998 for over 30 years. Keith was an integral part of the development of the 2012 and the 2017 National Electric Safety Code. He is an engaging speaker who has delivered training domestically and overseas.



Current Transformer (“CT”) Basics for System Protection Lunch and Learn

Date: Thursday – February 24th, 2022

Time: Seminar: 12:00PM – 1:15PM

Speaker: **Mallur Satyanarayan, PE:** Lead Engineer - System Protection Engineering & Design
Seminole Electric Cooperative, Inc.

Location: Webinar/Lunch & Learn (lunch is not provided)
Link will be provided to registrants

Cost: No Cost

PDH Credits: No PDH’s provided for this webinar. Florida exempt provider #00015.

RSVP: Online at <https://events.vtools.ieee.org/m/294046>

Questions: Robert DeMelo at robert.demelo@ieee.org

Abstract: Are you new to the field of system protection or have you ever been curious as to the difference between your typical “step-up” or “step-down” transformers used in substation/switchyard utility applications as compared to current transformers used for metering and relay inputs?

This lunch and learn presentation will cover the following as it relates to current transformers, also known as “CTs:

- a. A basic introduction to Current Transformers,
- b. How Current Transformers are different from “Regular” Transformers,
- c. A brief overview of the characteristics of Current Transformers as applied to a relay protection scheme, and
- d. Selection of Current Transformers with respect to core saturation for relay/protection scheme applications

Speaker: **Mallur Satyanarayan** – “Satya” – obtained his Bachelor’s degree in Electrical Engineering from Bangalore University, India and an MS in Physiology and Biophysics from the University of Kentucky.

He is a PE and has more than 30 years of experience in the electrical power industry in India, the Middle East and the USA in Utilities and Consulting Engineering.

His area of expertise is power system protection and he has also taught protection courses in industry and academia.

He is presently with Seminole Electric Cooperative in Florida.

Senior Member Elevation Program

On behalf of the Region 3 (R3), Section Support Committee (SSC) and in my capacity as the 2021, Senior Member Elevation Coordinator I would like to thank you for the assistance you provided to the Region 3 Senior Member Elevation Programme, to support R3 Senior Member applications.

Your contribution of time and effort is greatly appreciated. Through your participation, you have helped to accomplish and surpass the R3 Senior Member elevation goals set by IEEE. As a Region, our goal was by IEEE to elevate **220 members** to Senior Member for 2021. However we have surpassed that goal and elevated **428 members or 194.5% of the goal set** for 2021. You have been instrumental in making possible the elevation of deserving R3 IEEE Members to Senior Member status.

The Senior Member Program is one of our most vital membership development initiatives and one that brings prestige to successful candidates and to the IEEE as well. I would like to encourage you to continue to volunteer as reference provider and also nominate worthy colleagues so that they, too, can reap the benefits of Senior Membership.

Thank you again for your contribution and we look forward to working with you again in the year ahead as we continue to serve the needs of the Region 3 and by extension the IEEE and its members.

Sincerely,

Sharlene Brown

2021 Senior Member Elevation Coordinator

Note the Dates

Senior Member - Planning
Saturday, January 15, 2022
12:00 pm - 3:00 pm
Register: <https://events.vtools.ieee.org/m/295344>

Senior Member - Elevation
Saturday, January 29, 2022
12:00 pm - 3:00 pm
Register: <https://events.vtools.ieee.org/m/295348>

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Size	1 Month		6 Months		12 Months	
	Member	Non-Member	Member	Non-Member	Member	Non-Member
Business Cards	\$25	\$35	\$120	\$150	\$210	\$252
1/4 Page	\$40	\$52	\$190	\$380	\$335	\$402
1/2 Page	\$75	\$98	\$360	\$450	\$630	\$756
3/4 Page	\$110	\$143	\$530	\$663	\$925	\$1,110
Full Page	\$140	\$182	\$670	\$838	\$1,175	\$1,410
Insert / Sheet	\$200	\$260	\$800	\$1,000	\$2,000	\$2,400

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January 2022 - Calendar of Events (For more information see "Inside the SunCoast Signal" → Page 1)

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						<i>* New Years Day</i>
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		<i>*ExCom →Page 1</i>				
9	10	11	12	13	14	15
	<i>*Signal Inputs Due End of Day</i>					<i>*Sr. Member Planning</i>
16	17	18	19	20	21	22
23	24	25	26	27	28	29
						<i>*Sr. Member Elevation</i>
30	31					