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## Florida West Coast Section (FWCS)

## The SunCoast SIGNAL Newsletter

The Institute of Electrical and Electronics Engineers, Inc.

This Newsletter is Now  
**DISTRIBUTED**

**ELECTRONICALLY**

There is **NO** Print Edition

Also, it can be downloaded  
from the FWCS website:

<https://r3.ieee.org/fwc/newletter-archive/>

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Next ExCom Meeting  
Tuesday, November 4, 2025  
Google Meet  
Register with vTools

<https://events.vtools.ieee.org/m/508093>

### PE Corner

#### Art Nordlinger, PE, Life Senior Member The Steps to Professional Licensure, Part I

So you want to become a PE? Great! In the next couple of months I'll review the process to get your PE license. Though there have been several significant changes to the process in recent years, there are still essentially four steps required to get your PE.

First, get an ABET-accredited four-year engineering degree (or equivalent—see below). Second, take the Fundamentals of Engineering (FE) exam, formerly known as the Engineer Intern or Engineer in Training (EIT) Exam. Once you pass, you are an Engineer Intern (EI). Third, an EI must obtain appropriate experience, typically four years, as defined in the rules. And last, the EI may take the Professional Engineers exam. Passing the exam and having the required experience qualifies the applicant as a Professional Engineer.

Recently, the Florida legislature passed changes to the “equivalent” requirements to take the FE exam related to Engineering Technology Degrees. They also made changes to the experience and timing requirements to take the PE. These will be the subject of a future column.

In Florida, an applicant may apply to take the FE directly with the National Council of Examiners for Engineering and Surveying (NCEES).

The process is described on the FBPE website:

<https://fbpe.org/licensure/licensure-process/>

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**WEB PAGE:** <https://r3.ieee.org/fwc/>

**PE Corner - Cont'd from Page 2**

If the applicant obtained their engineering degree from a foreign institution not subject to ABET accreditation, the Board will typically require that additional information be provided to determine whether the courses taken are substantially equivalent to a program meeting ABET accreditation standards.

The FE exam has changed in several regards over the years. One thing that has remained consistent, however, is that the exam is administered by NCEES in all fifty states and most US territories. No matter what state you pass the exam in, that passing grade is accepted by every state.

Next, application to take the FE exam, and evidence of educational qualifications, used to be submitted to the Board in the state that the applicant intended to take the exam. Now, application is made directly to NCEES.

In terms of the exam itself, much has changed in recent years. The exam is computer-based and may be taken on any available date at designated testing centers where previously it was only given on two specific dates each year. The exam is one hundred ten questions in length, multiple choice, half in the morning and half in the afternoon with a 6-hour time limit and an optional 25-minute break. Nothing may be brought into the exam room except for pencils and an approved calculator. A list of approved calculators may be found on the NCEES website. An applicant is given a formula reference book provided by NCEES for use during the exam; you can't bring one with you.

Next, the exam used to cover eleven subject areas in the morning, followed by specific areas of the applicant's choosing in the afternoon. This has also changed to where the whole exam is specific to each engineering discipline. This is in line with changes in engineering curricula in that, for example, many electrical engineers no longer are required to take statics and dynamics, and structural engineers may not be required to take circuits.

Next month I'll discuss the experience required for an Engineer Intern.



## Florida Laws & Rules and Ethics for Professional Engineers

**Date:** Friday, November 14, 2025

**Time:** 10:00AM – 12:00PM (noon)

**Speaker:** Mr. Art Nordlinger, PE,

IEEE Representative to the Florida Board of Professional Engineers

**Location:** These seminars will be presented virtually

**Cost:** \$30 IEEE Members / \$60 Non-Members / \$10 IEEE Student Members

**CEH Credits:** One (1) Rules & Laws CEH will be awarded; and

One (1) Ethics CEH will be awarded, which will meet the current requirements for PE Renewals.

Be sure to enter your name and PE number on the signup website as it appears on your license.

IEEE Florida Provider Number is 0003849.

**RSVP:** Online at: <https://events.vtools.ieee.org/m/496020>

**Questions:** Art Nordlinger: [a.nordlinger@ieee.org](mailto:a.nordlinger@ieee.org) or Regan Sink: [rjsink@ieee.org](mailto:rjsink@ieee.org)

### Abstract:

The Rules and Laws That Govern the Practice of Engineering in Florida. This course is at a basic to intermediate level.

- ◆ " Florida Statute 471 – Engineering
- ◆ " FBPE and FEMC
- ◆ " Florida Administrative Code
- ◆ " Updates from NCEES and FBPE

Ethics and the Practice of Engineering in Florida. This course is at a basic to intermediate level.

- ◆ " Basic Engineering Ethics Precepts
- ◆ " Florida Administrative Code 61G15
- ◆ " Recent Cases and Examples

**Art Nordlinger, PE**, retired after a rewarding career in the electric utility industry, was most recently the Manager of Transmission Tariff and Contracts at Tampa Electric Company.

Art earned a Bachelor of Science degree in Electrical Engineering from Northwestern University in 1979 and his Master of Engineering degree in Electric Power Engineering in 1988 from Rensselaer Polytechnic Institute.

Art is a Life Senior Member of IEEE, Past Chair of the Florida Engineers Management Corporation (FEMC), and a registered PE in the State of Florida



## Student Activities – Florida Polytechnic University

**IEEE Florida Poly** has had a great start to our school year. We have been having a great time planning and hosting our September events and now going into October we have a “Spook-IEEE” month of scarily fun events to look forward to!

**Colby Bradford**  
[colby.bradford@ieee.org](mailto:colby.bradford@ieee.org)

**HKN-** IEEE HKN Mu Omega at Florida Polytechnic University has had a variety of events this semester. Beginning in September, Mu Omega hosted a Resume Workshop on September 17<sup>th</sup>; before the Florida Polytechnic University Career Fair. Lots of students came out and learned about how to improve their resume to show recruiters at the Career Fair. A workplace benefits & tax documents workshop will be hosted in partnership with Florida Polytechnic's Career Services in October. Highway Cleanups will continue October 18<sup>th</sup> & November 8<sup>th</sup>, both having volunteers help clean up SR 33. Our largest event for the semester will be our Day In [The](#) Life speaker event hosted on November 13<sup>th</sup>, from a licensed Professional Engineer, covering daily tasks, usable skills, certifications, and software for the industry.

**-Jacob Brescia, IEEE FL Poly HKN Chair**

**R.A.S.-** We are continuing our workshops and teaching our [members with](#) real life projects and applications by assigning them tasks related to our robot. The students were able to effectively simulate a tank chassis kit we got from Amazon into a 3D modeling software. The electrical team was able to build schematics we will need to build our field. We are focusing a lot on developing student skills this semester so we can be fully prepared for Southeast Conference; slowly taking on one more challenge at a time to a full robot and autonomous UAV. We also plan on hosting more events in the near future like attending the robot strawberry picking farm tour, hosted by FWCS RAS in mid-November.

**-Sahil Talwalker, IEEE FL Poly RAS Chair**

**P.E.S-** This month was the game night for PES; it was successful with 15 people in attendance. Later this month we will be hosting a three-day soldering workshop, teaching students of various skill levels about J-STD soldering standards. This will be carried out with the FWCS YP chair Aedan Casey and the IEEE FL Poly Student Branch. Next [month](#) will be the mock circuit competition, utilizing Arduinos to create a Morse Code Decoder. This month and next month the joint PCB competition with RAS will still be ongoing. 'Open lab' sessions are being held for students to come in and ask questions or get constructive criticism on their designs. Their designs will be due in roughly three weeks, with judging taking place not long after.

**-Will Carroll, IEEE FL Poly PES Chair**

C.S.- Over the last month and a half, IEEE Computer Society has held several general meetings, including remote guest and hybrid guest speaker events. On September 15th, we had Andy, Ron, and Antra explain the benefits of being an IEEE member, some of the opportunities available to students and how to become a member. On September 18th, we held the Rust Workshop Part 1, where we introduced students to programming using the Rust programming language, as well as common concepts in programming. On September 22nd, we had Harvendra Singh from Publix and Amit Prasad present on the use of Cloud Infrastructure and AI in the industry and what tools students can look into to better their understanding. On September 29th, we held a review session for IEEEExtreme, a 24-hour programming hackathon. On October 2nd, we held the rust workshop part II, where we presented on rust project management, generic programming, and introduction to async rust. On October 6th, we held a project day, where we had members of IEEE computer society come to work on the escape room project or work on personal projects. Tomorrow, October 13th, we will hold our 2nd review for IEEEExtreme, where we will talk about dynamic programming and registration for the IEEEExtreme. On October 16th, we are holding, in collaboration with Robotic Society, the Rust Workshop part 3, where IEEE FL Poly RAS member Joshua Gottus will present embedded programming with Rust and demonstrate with a microcontroller. On October 25<sup>th</sup> the IEEEExtreme programming competition will be held. October 27th, we are holding our Docker Workshop in Collaboration with Harvendra Singh and Amit Prasad. We will show how to build images and work with Azure's container registry.

**-Noah Campise, IEEE FL Poly CS Vice Chair**

**The IEEE FL Poly Student branch** has our collaboration event with the FL Poly American Society of Mechanical Engineers Student Branch and the FL Poly Career Services Office coming up on October 23rd to host Lakeland Electric Engineers to table and talk to students about a day in the life of an engineer, some skills and tools that would behoove them to learn for the Utilities industry, and their personal journeys throughout their careers! We are also getting ready to host our October General Body Meeting sometime in the next two weeks to make sure our fellow students and members know about the awesome events and opportunities that ourselves and the FWCS have coming up for them to get involved in. Those of us not programming in the IEEEExtreme competition will be attending the FWCS Year-End Banquet on October 25<sup>th</sup> at the St. Petersburg Yacht Club, and we are excited to see everyone there!



Year 2025 - Florida West Coast Section - Upcoming Events Summary			A*
Date / Time	Organization Contact	Description email / Registration / Website / Venue	
Monday, Nov 3	Floriday Poly - CS	Data Readiness and Cybersecurity	V
6:00 pm - 7:30 pm	Reginald Davis	Microsoft Professional <a href="https://events.vtools.ieee.org/m/503872">https://events.vtools.ieee.org/m/503872</a>	
Thursday, Nov 6	FWCS - CS	Monthly Meeting	V
6:30 pm - 7:30 pm	Antra Melhotra	<a href="mailto:antra.malhotra@ieee.org">antra.malhotra@ieee.org</a> <a href="https://events.vtools.ieee.org/m/496919">https://events.vtools.ieee.org/m/496919</a>	
Saturday, Nov 8	USF	Tech X - Florida AI Conference	P
11:00 am - 5:00 pm		USF Engineering Bldg. II - Hall of Flags <a href="https://events.vtools.ieee.org/m/499182">https://events.vtools.ieee.org/m/499182</a> 3820 USF Alumni Drive, Tampa, Florida 33620	
Monday, Nov 10	Floriday Poly - CS	This is our general project/study/learning day!	P
6:00 pm - 8:00 pm		<a href="https://events.vtools.ieee.org/m/503879">https://events.vtools.ieee.org/m/503879</a> Room: 1048, Bldg: IST, 4450 Polytechnic Circle, Lakeland, Florida 33805	
Friday, Nov 14	FWCS - PES/IAS	Florida Laws & Rules and Ethics for PEs	V
10:00 am - 12:00 pm	Art Nordlinger	<a href="mailto:a.nordlinger@ieee.org">a.nordlinger@ieee.org</a>	
	Regan Sink	<a href="mailto:rjsink@ieee.org">rjsink@ieee.org</a> <a href="https://events.vtools.ieee.org/m/496020">https://events.vtools.ieee.org/m/496020</a>	
Friday, Nov 14	FWCS - RAS	Robotics: Harvesting Strawberries with	P
4:00 pm - 5:00 pm		Robots and AI <a href="https://events.vtools.ieee.org/m/503866">https://events.vtools.ieee.org/m/503866</a>	
Monday, Nov 17	Floriday Poly - CS	This is our general project/study/learning day!	P
6:00 pm - 8:00 pm		<a href="https://events.vtools.ieee.org/m/503879">https://events.vtools.ieee.org/m/503879</a> Room: 1048, Bldg: IST, 4450 Polytechnic Circle, Lakeland, Florida 33805 <a href="https://events.vtools.ieee.org/m/503880">https://events.vtools.ieee.org/m/503880</a>	
Wednesday, Nov 19	FWCS CS	Professional Development Webinar Series – 2025	V
8:00 pm - 9:00 pm		<a href="https://events.vtools.ieee.org/m/503835">https://events.vtools.ieee.org/m/503835</a>	
Thursday, Oct 20	FWCS - PES/IAS	ExCom	V
12:00 pm - 1:00 pm	Kayla Allemang	<a href="mailto:kallemang@ieee.org">kallemang@ieee.org</a> <a href="https://events.vtools.ieee.org/m/450350">https://events.vtools.ieee.org/m/450350</a>	
*Attendance: V: Virtual --- P: In Person --- V & P: Virtual and In Person			

# SAVE THE DATE

## FWCS End of Year Gala Banquet

**When:** Saturday, October 25, 2025

**@ 5:00 PM – 10:00 PM**

**Where:** St. Petersburg Yacht Club

11 Central Ave.,

St. Petersburg, FL 33701

**Contact:** Hermann Amaya,

[hermann.amaya.us@ieee.org](mailto:hermann.amaya.us@ieee.org)

**Register Here:**

<https://events.vtools.ieee.org/m/488122>

## Celebration of FWCS

**Speakers, Recognitions & Awards**

**Opportunity to Network with**

**IEEE Members**

**Connect with Student Branch**

**and Young Professionals**

**Amazing Yacht Club Dinner**

<https://r3.ieee.org/fwc/banquet/>

### Florida West Coast Section - SunCoast SIGNAL Advertising Rates

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Size	1 Month		6 Months		12 Months	
	Member	Non-Member	Member	Non-Member	Member	Non-Member
1/4 Page	\$50	\$75	\$250	\$450	\$350	\$450
1/2 Page	\$75	\$100	\$350	\$550	\$650	\$750
3/4 Page	\$125	\$150	\$550	\$750	\$950	\$1,250
Full Page	\$150	\$200	\$750	\$950	\$1,250	\$1,450



*IEEE Florida West  
Coast Section  
(FWCS)  
Tampa, Florida*

**IEEE FWCS  
P. O. Box 176  
Land O' Lakes,  
FL 34639-9998**

**November 2025 - Calendar of Events** (For more information see "Inside the SunCoast Signal" → Page 1)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
	*Data Readiness Cybersecurity →Page 6	*FWCS ExCom →Page 1		*FWCS CS Monthly Meeting →Page 6		*USF Tech X AI Conference →Page 6
9	10	11	12	13	14	15
	*Signal Inputs Due End of Day				*FWCS - PES/IAS Florida Laws →Page 3 *FWCS Robotics →Page 6	
16	17	18	19	20	21	22
	*Florida Poly CS Learning Day →Page 6			*FWCS PES/IAS ExCom →Page 6		
23 / 30	24	25	26	27	28	29

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