1. [STEAM Rocks](http://www.ewh.ieee.org/r3/orlando/STEM.html) with Engineer Doctor Deb Hall IEEE & SWE Sponsored
2. STEM in The Classroom – FES & School Sponsored Event, see page 2.
3. [Dream Big](https://www.dreambigfilm.com/)  [Streaming On Netflix](https://news.asce.org/dream-big-now-streaming-on-netflix/) In classrooms by Christmas?

DVDs are on order for all Florida Schools. [ASCE Outreach](https://www.asce.org/dream-big/) w/[STEM](https://www.asce.org/pre-college_outreach/)

1. Project CREATE FES/School Sponsored Event August 2018 ~ February 2019
2.

Ben Pernezny, P.E., FES,

Central Florida, Saturday, February 9, 2019 [State Competition](http://www.fleng.org/mathcounts.cfm) Friday, March 22 , 2019

1. [Engineering Encounters](http://bridgecontest.org/), ASCE Sponsored
2. [Odyssey of the Mind](http://odysseyofthemind.com/) Reg. Tourney - Magic Anna Long, Esq., ALong@deanmead.com

Sat., Feb. 16, 2019 Judges Training; Sat., March 2, 2019 Regional Tournament;

Odyssey State Tournament – Sat, April, 2019 World Finals May 2019

1. STEM Nights – School Sponsored – STEM CFL Supported Contact is Engineer Mark.
2. [Science Olympiad](http://www.floridascienceolympiad.org) [Schedule](http://www.floridascienceolympiad.org/calendar.html) [www.floridascienceolympiad.org](http://www.floridascienceolympiad.org) Mike McKee Jan 19 2019
3. [SECME Regional Competition](https://stem.ucf.edu/secme/) <https://stem.ucf.edu/secme/> UCF Sat., Feb. 16, 2019

1. [FIRST](https://www.firstinspires.org/) Robotics  <https://www.firstinspires.org/> **Mentors**

[Lego Jr. League](https://www.firstinspires.org/robotics/flljr) (K-4th Grade) [Lego League](https://www.firstinspires.org/robotics/fll) (4-8th Grade)

[FTC](https://www.firstinspires.org/robotics/ftc) (8-12th Grade) [FRC](https://www.firstinspires.org/robotics/frc) (9-12th Grade)

1. [2019 EngineerGirl Writing Contest](https://www.engineergirl.org/) <https://www.engineergirl.org/> February 1, 2019
2. [AWWA](http://www.fsawwa.org) [Water Tower Competition](https://www.fsawwa.org/page/140), November 3, 2018
3. **Mentors** and/or [Teach IN](https://www.foundationforocps.org/p/40/teach-in-2015#.WdZqW8LfNeQ) [Seminole](https://www.scps.k12.fl.us/district/departments/community-involvement/dividends-volunteer-programs.stml) November 13, 2018, [Orange](https://ocps.net/departments/community_resources_/a_d_ditions_school_volunteers) November 14, 2018
4. [I/ITSEC](http://www.iitsec.org/) November 25 – November 30, 2018
5. County Science Fairs, [Volusia](http://myvolusiaschools.org/science/Pages/Competitions.aspx) Jan. 26, 2019, [Polk](http://moodle.polk-fl.net/mod/page/view.php?id=67430) Jan 28- 29, 2019  [Seminole](https://www.scps.k12.fl.us/district/departments/teaching-learning/special-programs/science-fair.stml), Feb. 2, 2019, [Sumter & Marion](https://www.marionschools.net/Page/62766)Feb 7, 2018  [Orange](https://www.yingexpo.com/)February 21, 2019 [Brevard](https://fl02201431.schoolwires.net/cms/lib/FL02201431/Centricity/ModuleInstance/20684/Northern%20Division%20Art%20and%20Science%20Fair%20Handbook.pdf) Northern February 27, 2019, [Brevard](https://fl02201431.schoolwires.net/cms/lib/FL02201431/Centricity/ModuleInstance/20684/Northern%20Division%20Art%20and%20Science%20Fair%20Handbook.pdf) Southern March 12, 2019 [State](https://ssefflorida.com/) March 26-28, 2019

Science Technology Engineering & Math (STEM) in your Classroom Will you please volunteer your grade for STEM in Your Classroom? FES will recruit a STEM professional (STEM Pro) for each of your class rooms.  Each STEM Pro shares a twenty five (25) minute presentation to a class. Then your students rotate to another classroom. After two hours each student has learned four (4) STEM principles. The presentations may be hands-on so that your students may apply experiment with a STEM concept.  Presentations may include. Contact Engineer Mark.

* Airport Design – Design an airport layout on paper w/ key elements of Airport Design.
* Candyland – Structural in nature. Design and build a town from the ground using candy.
* Chemical Engineering –Water is a chemical compound with chemical formula H2O.
* Drainage –Flow water through different size pipes and funnels.
* Geotechnical Engineering –The kids learn about sinkholes and soils.
* GPS – The kids learn the nuances behind surveying and Global Positioning Systems
* Magnetism –Conservation of energy, Newton’s cradle & Gaussian Gun and Magnetic brakes.
* Park Design –Design a park on paper after learning about the important aspects of design.
* Public Works – Kids learn about essential Public Infrastructure
* Roadway Design – Roads, traffic, Pedestrian, Bicycle, Driver, and Passenger Safety
* Robotics –FIRST Lego League, Tech Challenge, Search-Rescue, w/Gracious Professionalism
* Shake Table: Build structure out of spaghetti and gun drops and test on shake table.
* Simple Machine – Fulcrum, lever, projectile, launch/recovery vehicle, make catapult.
* Solar Power Bridge – Demonstrate Model in Classroom
* Surveying – Traditional methods of demonstrating surveying.
* Town Design –Town building, planning and zoning.
* Water and/or Wastewater Engineering
* What is an Engineer? - STEM [FES Video](http://www.fleng.org/k-12/resources.html) and/or [FES Discovering Engineering PowerPoint](http://www.fleng.org/k-12/resources/2010_fes_dis_eng2.ppt).

STEM Resources: ASCEville: [www.ASCEville.org](http://www.asceville.org/)

Amer. Institute of Aeronautics and Astronautics [AIAA Educator Associate Membership](https://www.aiaa.org/iframeonecolumn.aspx?id=3411&url_success=http%253a%252f%252fwww.aiaa.org%252fiframeonecolumn.aspx%253fid%253d3412%2526webcode%253daiaaeama%2526mbtkey%253d590fa561-e249-475e-b9a4-ac4cc126596d%2526action%253dadd%2526key%253d00000000-0000-0000-0000-000000000000%2526productid%253d255%2526usertoken%253d%257btoken%257d%250d%250a)

ASCE Teaching Resources <http://www.asce.org/kids/>

[Dream Big](https://www.dreambigfilm.com/)  <https://www.firstinspires.org/>  [Streaming On Netflix](https://news.asce.org/dream-big-now-streaming-on-netflix/) <https://news.asce.org/dream-big-now-streaming-on-netflix/>

Energy Lessons and Activities <http://www1.eere.energy.gov/education/>

Engineer Your Life – careers you’ll love <http://www.engineeryourlife.org/>

FES Classroom Resources <http://www.fleng.org/k-12/resources.html>

[FIRST](https://www.firstinspires.org/) Robotics <https://www.firstinspires.org/>

Florida MATHCOUNTS <http://www.fleng.org/mathcounts.cfm>

**[IEEE](http://www.ieee.org/)** [STEM](http://www.ewh.ieee.org/r3/orlando/STEM.html) http://www.ewh.ieee.org/r3/orlando/STEM.html

Odyssey of the Mind <http://odysseyofthemind.com/>

Project CREATE [http://adv.fleng.org/cf/committee\_pages/Projectcreate.html](http://adv.fleng.org/cf/committee_pages/projectcreate.html)

Science Olympiad. [www.floridascienceolympiadorg](http://www.floridascienceolympiad.org)

[SECME Regional Competition](https://stem.ucf.edu/secme/) <https://stem.ucf.edu/secme/>