



Career Academies  
of the Wake County Public School System



# Southeast Raleigh Magnet High School

## Engineering Career Academy Newsletter

VOLUME 3, ISSUE 2

SPRING 2016

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# Goodbye 2016 - Hello 2020

Dear Class of 2016,

*It's always bitter-sweet when a class graduates. This class of 2016 has seen and done a lot. You have become a very tight knit group from taking your New Tech and academy classes together. You also formed bonds when you went on all of those OLE's. I know you really enjoyed them and not just because you went off campus to lunch as some of you say. Good luck and keep in touch. Someday I want to make a graduate spotlight about you and hang it on our wall. Mr. Geraghty*

I am very proud of all the graduates and a special thanks goes to Gianni Absillis for keeping our streak alive . . . What streak? You ask . . . For 4 years now the Valedictorian or Salutatorian has been a member of the Engineering Academy. By looking at the next few classes, that streak should continue . . (no pressure Korbyn and Jack)

As these student go off to further their learning we are excited to welcome 46 new freshman into the Academy. These students are from middle schools all over the county; Centennial, Heritage, East Garner, Ligon, Holly Grove, Martin, Daniels, Moore Square, Wakefield, Carnage, Zebulon and Rolesville. This is a testament to what a great school and academy we have. Even though you are from all over, you too will become best friends by being in New Tech and the Engineering Academy. I

look forward to meeting everyone at the Bulldog Institute on July 12th and 13th. Have a great summer....GO BULLDOGS!!  
Mr. Geraghty

### Do you shop at Amazon.com?

**If so, Amazon will give the Engineering Academy money.**

**Amazon Smile is the part of their organization that donates a percentage of sales to tax exempt businesses.**

**We will get .5% of sales on SmileAmazon.com when you use this site:**

<https://smile.amazon.com/ch/46-0953611>

### Important Dates:

May 26 - Graduation

July 12th & 13th - Bulldog Insitute

May 28 - July 24 SUMMER BREAK!!!

July 25 - First day of School

## Oh, the Places You'll Go . . .

- Gianni Absillis:**  
NC State
- Isaiah Barco:**  
NC A&T
- Morgan Beatty:**  
Wake Tech
- Terrance Brown:**  
NC A&T
- Jameson Clanton:**  
Catawba College
- Teagan Dorsch:**  
UNC-Charlotte
- Nile Ferrell:**  
NY Institute of Tech.
- Marion Fondevilla:**  
Wake Tech
- T.J. Gresham:**  
UNC-Charlotte
- Victor Harrison:**  
St. Augustine College
- Westley Hinton:**  
NC A&T
- Jordan Krumm:**  
Wake Tech
- Anna Lockett:**  
Appalachian St.
- Marcus Mitchell:**  
NC A&T
- Grace Ngonyo**  
NC State
- Brendan Price**  
Univ. of Alabama
- Ashley Webb**  
NC A&T or UNC-Char

# Congratulations - Class of 2016



On May 10th the advisory board hosted the Academy Banquet to honor those seniors who graduated with Academy Credentials in the Bio Medical, Engineering and IT Academies. The banquet committee, Mrs. Dotty Barco, Judy Protz, Desiree Palmer-Smith and Jenay Marbury led a group of volunteers who obtained the venue, hired the caterer, set up and decorated, served the food and cleaned up. Thank you to them and all the parents who donated time, money and materials. It wouldn't have happened without you.

The Engineering Academy has 17 graduates (13 of whom attended the banquet) and we are proud to say that all of them will continue their education at an institution of higher education. Most of them will continue their studies in Engineering, however a few decided that it wasn't for them. Good luck to everyone and I'm sure we will see great things from this awesome class.

Junior Achievement's Bebee Lee put us in touch with our guest speaker, Monica Cutno. Ms. Cutno has a BS in Chemical Engineering and her MBA. She co-founded and is president of Envision Science Academy. She inspired the graduates to work hard and never give up. She was pleased to be an honorary Bulldog by accepting a SRMHS Bulldog t-shirt with her name on the back.

After dinner and Ms. Cutno's speech, the graduates were awarded their certificates and stoles.



Senior Internships

Museum of Natural Sciences

NC State - Dept. of Natural Resources

Securadyme Systems

Habitat for Humanity Restore

Simpson Engineering

T&T Creative Group

Blue Wire Communication

Device Solutions

Thai Villa

KFC / Taco Bell

# Congratulations - Class of 2016



**To the class of 2016:** The road of life has many forks, choose wisely; Treat everyone with the same respect, whether it's the CEO or the Custodian; You will make mistakes, learn from them; Don't cheat, don't lie, don't steal; Give back when you are able; and lastly I leave you with a great quote: *"The world will not be destroyed by those who do evil, but by those who watch them without doing anything."* Albert Einstein

# FIRST Robotics

SRMHS hosted the FIRST robotics North Carolina District Competition.



Engineering Academy students; Jack, Seth, Josh, Robert and Aislinn talking to the judges about their robot.

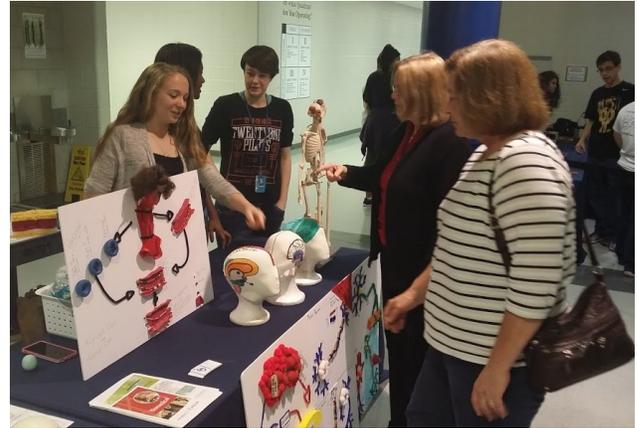
Parents and Teachers came out to support Mr. Kemp and the team.

# STEMinar

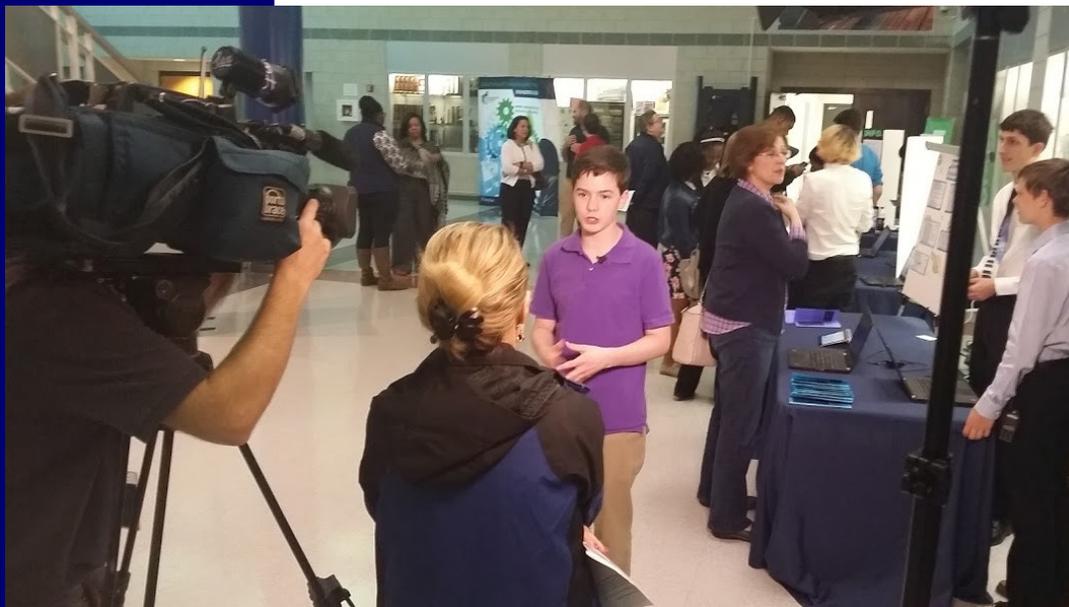
In March, the Academies hosted the first annual STEMinar to show off our great STEM classes. The FIRST robotics team, VEX robotics team, Lenovo APP team, the Bio-Med Academy, the IT academy, and the Engineering Academy was well represented.



Lenovo Scholar Network App unveiling.



Bio-Med Academy students showing off during the STEMinar



The event was covered by News Channel 14.

Jordan Parrott did a great job answering questions for TWC-14

## NEWS LINK

<http://www.twcnews.com/nc/triangle-sandhills/top-stories/2016/04/11/high-school-students-work-with-lenovo-to-create-apps-.html>

## Academy Partners

- Lenovo
- Siemens
- MetLife
- Cisco
- US2020
- Junior Achievement
- NC DOT
- GE Aviation
- Duke Energy
- Securadyne
- NCSU
- Bohler Engineers
- Simpson Engineers
- Habitat for Humanity

# Career Experiences

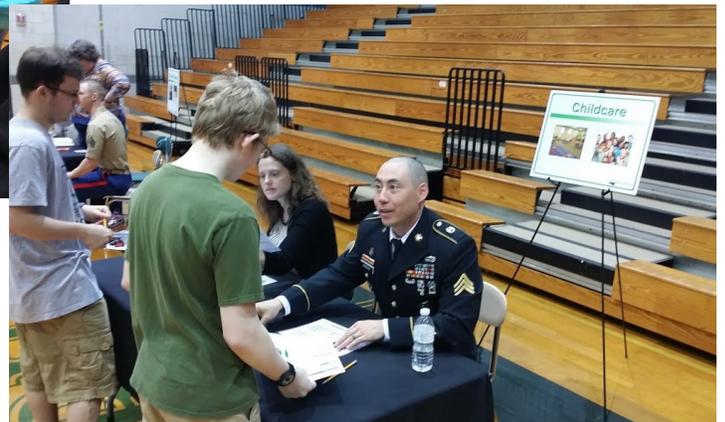
Jameson Clanton working hard at his internship with Simpson Engineers



Morgan Beatty also working hard at her internship at Securadyne.



Students got a taste of the “real world” by having to learn about budgeting in the Money Matters seminar offered by NC State Employees Credit Union.



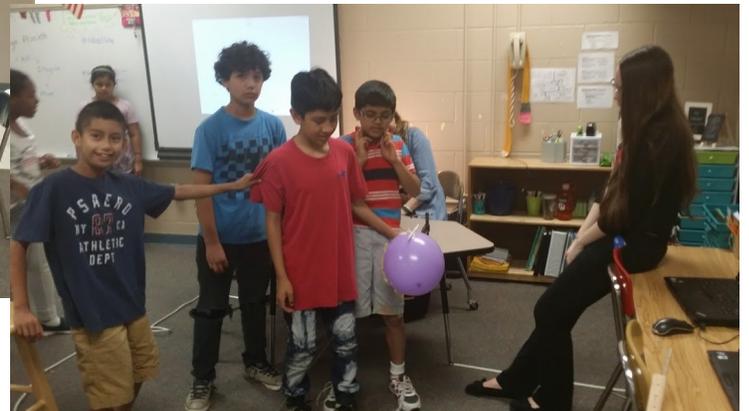
# OLE's (Off-site Learning Experiences)



Learning about careers in the NC Dept. of Transportation



Three students joined Mr. Geraghty at Fuller Elementary for their Career Day. Morgan Beatty, Nathaniel Orsak and Jordan Parrott taught the students about careers in engineering and lead them in a problem solving activity. All four classes who rotated through really enjoyed their time with us.



# STEM Expo

# OLE's continued



In April, twenty-six students participated in the STEM Expo sponsored by US2020 in the RTP. Students learned about Citizen Science and actually participated in collecting data on wildlife images. In the second session the students walked around and made connections with regional companies, organizations and college/universities. The last session was the food trucks, always a favorite.



Andrew, Max, Westley Logan, Michael and Abanoub excited to learn about something.



Thomas, Brandon and Abanoub learning about runoff.



Kendra handing out some of her business cards I'm sure.

Kai and Abanoub seeing what life is like in Virtual Reality



# OLE's continued

Civil Engineering and Architecture students visited Bohler Engineering and SRMHS graduate and Civil engineer Michael Roselli. The students were eager to learn about what a Civil Engineer actually does.



The same day we went to the NCSU  
Constructed Facilities Laboratory



**KNOW  
Luncheon**

# OLE's continued

Three students participated in the Morrisville Chamber of Commerce Knowledgeable Network of Women luncheon at Briar Creek Country Club. Alexis Green, Kendra Canegata and Jeremiah Harris were happy to sit at the Lenovo table where they renewed their connection with Ms. Karen Ondrick.



They were fed very well and listened to the keynote speaker, Dr. Jenna Carpenter, Dean of the College of Engineering at Campbell University.

They also took full advantage of networking with a variety of professionals.



## NATIONAL FLIGHT ACADEMY

Big NEWS: Akeem Blalock was selected by Junior Achievement to go to the Delta Flight Academy in Pensacola FL. Thirteen students showed an interest and six turned in essays. Then a panel at JA reviewed all the essays and selected Akeem as the recipient.

This 6 day camp on board the aircraft carrier *Ambition* uses the latest multisensory media and sensory technology to create an immersive naval aviator experience. We can't wait to hear about it and see some pictures.

## NEW TECH Staff

Jessica Miller - Math  
jlmiller1@wcpss.net

Trevor Johnson - Math  
tjohnson13@wcpss.net

Aaron Willis - Math  
aewillis@wcpss.net

Cheryl Logan - Health & PE  
cllogan@wcpss.net

Blake Craft - English  
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Kelly Snyder - English  
ksnyder3@wcpss.net

Laura Woodard - English  
lwoodard2@wcpss.net

Donna Americo - Science  
damerico@wcpss.net

Alexander Bienkowski - Science  
abienkowski2@wcpss.net

Jason Remy - Science  
jremy@wcpss.net

Kari Threadgill - Science  
kthreadgill@wcpss.net

Jodi Hanes - History  
jhanes2@wcpss.net

Drew Stevenson - History  
dstevenson@wcpss.net

Daniel Hawley - Spanish  
dhawley@wcpss.net

Gia Oke-Bello - Spanish  
goke-bello@wcpss.net

# Academy Enhancements

## *New Tech:*

Next school year don't be surprised if your core New Tech teachers join us on some OLE's. We are trying to be more inclusive with our New Tech teachers.

## *Team Leads:*

We will institute Team Leads to give more leadership opportunities to students. This is instead of officers because I thought that was too formal. We will have 3 Team Leads for each class. They will help with open house, special events, marketing/recruitment, attending advisory board meetings, disseminating information to classmates after board meetings, being interviewed on field trips, etc. If you would like to be a Team Lead for your class, please email Mr. Geraghty - jgeraghty@wcpss.net

## *Academy Polos:*

It will be a requirement for students to buy a blue Engineering Academy Polo shirt. These will be worn on OLE's as well as school events like Magnet Open House and Magnet Fairs.

## *Mentors:*

Beginning next year we will begin a mentor program where academy students will mentor younger academy students. So students in the class of 2018 will be paired up with a student in the class of 2020. These mentors will be there to give advice, help tutor or just serve as a friend.

## *Echo:*

We will become more streamlined with the core New Tech courses by utilizing Echo instead of Edmodo. Therefore, you will only have to log in to one place to complete assignments for the Academy and New Tech classes.

## *Office Change:*

Our office will no longer be in 313, we have been moved to the office adjacent the CDC to be more centrally located in the main office complex. I will send out our exact room number and office phone number when I get it.

## *New Staff:*

We are in the process of trying to replace the irreplaceable Mr. Eckenrod. We hope Mr. Welker, student teacher under Mr. Beatty this spring, will get the job.

# Advisory Board Update

## Academy Advisory Board Retreat—June 22nd 6pm.

I hope next year we have more parental involvement. As we grow there becomes even more of a need for committees to help organize things like recruitment, internships, fundraising etc.

I know many of you would love to get involved but are not sure what you could do.

Here's a list of things you could do:

- Become a volunteer -  
As a volunteer you could be a guest speaker in a class, participate in mock interviews, help out with career readiness workshops or just help out in the classroom.
- Be a chaperone -  
We go on a multitude of Offsite Learning Opportunities and we are always in need of chaperones.
- Ask your company to offer field trips, job shadowing and/or internships.
- Join the Academy Board -  
Help set the direction of the academy by working with other parents and industry leaders who see the value in the academy.
- To volunteer for any of these opportunities or if you have any questions, e-mail Mr. Geraghty - [jgeraghty@wcpss.net](mailto:jgeraghty@wcpss.net)

### Important Links and Information

Mr. Geraghty - [jgeraghty@wcpss.net](mailto:jgeraghty@wcpss.net)

Mr. Beatty - [tbeatty@wcpss.net](mailto:tbeatty@wcpss.net)  
Class Site - <http://mrbeattysclass.weebly.com/>

Mrs. Laing - [dlaing2@wcpss.net](mailto:dlaing2@wcpss.net)  
Class Site - <http://mrslaing.weebly.com>

Follow the Engineering Academy on Twitter  
[@SEengAcademy1](https://twitter.com/SEengAcademy1)

<http://southeastraleigheaab.weebly.com/>

### Key for the Academy Acronyms

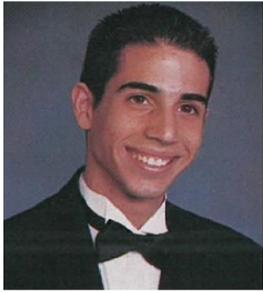
PLTW - Project Lead the Way  
OLE - Off-site Learning Experiences

IED - Introduction to Engineering Design  
POE - Principles of Engineering  
DE - Digital Electronics  
AE - Aerospace Engineering  
CEA - Civil Engineering and Architecture  
EDD - Engineering Design and Development

NAF - National Academy Foundation

CDC - Career Development Coordinator  
CA - Career Academy  
CDF - Career Development Facilitator

# Graduate Spotlight



## Robert Aponte - Class of 2001 Mechanical Engineer - Allied Power Group

Robert refurbishes gas turbine components for the power generation and oil & Gas companies.

“I still credit those classes at Southeast as the driver for me studying engineering and becoming a mechanical engineer professionally.”

“Until I took those classes I wanted to be a graphic designer. Luckily those visualization skills transferred very well into the auto CAD drafting courses at SE which pushed me towards more technical thinking.”

“I still have to interpret and make technical drawings in my line of work today.”



# Graduate Spotlight

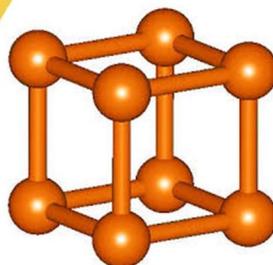
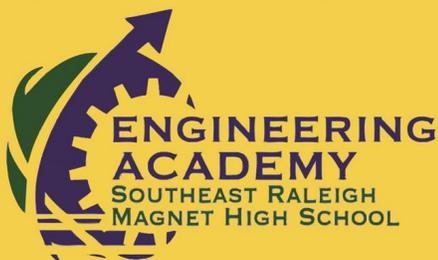


## Kate Caldwell - Class of 2001 Research Scientist

“I studied Mechanical Engineering at NCSU where I completed my BS and MS in 2005 and 2007 respectively. After graduation I moved to England and worked on a variety of projects from wind turbine blades, to high performance racing sailboats, to the 27 meter long carbon fiber clock hands for the largest clock tower in the world.”

“At SRHS I was a member of the inaugural FIRST robotics team. My involvement with the robotics program allowed me to discover my passion for engineering as well as hone my leadership, time management and teamwork abilities.”

“During college and graduate school I worked as a mentor with the robotics program at SRHS in order to help grow the program and give future students an opportunity to discover engineering.”



## HARP Engineering