Exploring Engineering Academy at Georgia Tech
June 4 - June 9, 2017

Exploring Engineer Academy is the oldest and largest secondary school academy in the nation dedicated toward STEM careers. Now celebrating our highly successful 17th year on the campus of Georgia Institute of Technology, academy students learn all about the different fields of Engineering and Science. Students come from Metro Atlanta, all over Georgia, as well as across the country, exploring how to become a successful Engineer or Scientist! EEA had another great summer camp this year with over seventy-five (75) high school boys and girls who enjoyed an action packed week full of engineering activities at Georgia Tech thanks to Metro-Atlanta Professional Engineering Societies and the Boy Scouts of America Learning for Life/Exploring Program.

This year students explored engineering as a profession by engaging in hands-on activities and experience living on the Georgia Tech campus for one week. This annual program is sponsored by the Georgia Engineering Foundation and the Learning for Life Division of the Atlanta Area Council, Boy Scouts of America. Leadership in planning support also comes from the efforts of Volunteers from the American Society of Civil Engineers, the Society of American Military Engineers, the Institute of Transportation Engineers, and the Institute of Electrical & Electronics Engineers. Support is generously provided from professional engineer mentors, sponsoring local corporations, and from donations received from engineering firms throughout the metro Atlanta area who donated scholarships and their valuable time. The Exploring Engineer Academy Committee has provided leadership for the last 17 years, growing the academy from 10 students, into a record 75 students (with 20 female students-another record) into two concurrent STEM tracks.

The 2017 Exploring Engineer Academy was held from June 4-9, 2017 at Georgia Tech under the direct supervision of professional engineers, scientists, and engineering faculty. Please visit Exploring Engineer Academy, at http://www.atlantabsa.org for more information. The Academy’s goal for next year is to expand to 100 engineering bound students.

Also due to the highly successful growth and leadership of the Academy, the Society of American Military Engineers have requested to collaborate with EEA and its committee to help promote and provide guidance as a national model for other SAME Posts throughout the country! This past year SAME has initiated national planning leadership to provide training, best practices as well as a guidance for SAME Posts wishing to start their own Exploring Engineer Academy and in getting more youth excited about engineering.
Welcome to first day of EEA on the Georgia Institute of Technology Campus

The goal of the Exploring Engineering Academy is to bring talented students to the Georgia Institute of Technology campus to excite and expose them to the world of engineering in the hopes that they will pursue an engineering career. The experience will open their minds so that they will realize that they can obtain an engineering/scientific degree. Students tour state-of-the-art engineering laboratories on the Ga Tech campus plus research and engineering facilities of major corporations around metro Atlanta.

Students trying their steady hand at Flying Drones
EEA students ready to Tour New Engineering Marvel at The Brave’s Battery in Atlanta
EEA students learning about aircraft engines at Delta Tech Ops Center.

Students discussion of Civil Engineering Military options at Dinner with a Professional.
Experiments at the Novelis Aluminum Recycling Production Plant in Marietta, GA
Tour of Delta Technical Ops Center inside real Cockpit of Boeing 747 aircraft

Behind the Scenes Engineering Tour of the Georgia Aquarium Operations
Students Learning about Engineering Fast Cars at Porsche Tech Ops Center in Atlanta
Students Hands-On Designing at the GT School of Architecture

Students Designing Concrete Beams at GT Dept of Civil & Environmental Structures SEMM Lab
Learning about the IT production process at the Weather Channel of Atlanta

Learning about Electromagnetic Induction and Static Electricity at Ga Power HQ
Participants explore engineering as a career by engaging in hands-on engineering activities, touring engineering facilities, and interacting with engineers and students from all major engineering disciplines. The overnight six-day campus program consists of a different engineering theme each day into two concurrent STEM Tracks featuring various STEM professions. The program not only focuses on the important skills needed for success in the fields of engineering and technology such as math and science but also looks at problem solving, design and analysis, team building, project management, communications, and leadership.
Students testing samples at Ga Tech’s Microbiology Labs

Students design and build Robotic Vehicles at Ga Tech School of Computing Science
Learning about electricity with hands-on activities at the GT EECS Power Laboratory
EEA students obtain a “Physics behind the rides” visit of Six Flags and learn how rides are designed.

A steering committee made up of Professional Engineers plans this annual camp and is made up of volunteers from the engineer community in the Atlanta area and staff from the Learning for Life Division of the Atlanta Area Council of the Boy Scouts of America. The Academy receives donations from local engineering firms throughout the metro Atlanta area which results in providing several scholarships for need based students. We look forward to another Great Exploring Engineering Academy in 2018. Applications are available at http://www.atlantabsa.org or for more information please contact Richard Morales at RMorales@LBFoster.com.

Students attending the ASCE Dream Big IMAX Showing at the Atlanta Fernbank’s Museum of Natural History
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EEA Planning Committee Members

Richard Morales, P.E., M.Sc., F.ASCE, M.SAME
Chairman – Exploring Engineer Academy

John (Jack) W. Seibert, III, P.E., F.SAME
Program Committee – EEA Foundation

Kim Mullins, EIT
Program Committee – Volunteers & Member Coordinator

Jim Remich, P.E., M.IEEE, M.GSPE
Georgia Engineering Foundation – Electrical Engineering Day

Jim Fisher, P.E.
Program Schedule – Presidential Scholars Coordinator & Aerospace Day

Van Foster, P.E., M.SAME
Program Schedule – Society of American Military Engineers

Ray Willcocks, P.E., F.SAME
Program Schedule – Society of American Military Engineers

Tony Belcher, P.E.
Program Committee – GA DOT & Civil Engineering Day

Randy Brannen P.E & Diane Brannen P.E.
Program Committee – Georgia Power & Electrical Engineering Day

Ronnie Davis, P.E., M.SAME
Program Committee – Society of American Military Engineers

Asa Williams, P.E.
Program Committee – US Dept of Commerce Economic Development Administration

Mike Holt, P.E., M.ITS
Transportation Committee Chair – ITSGA Transportation Day

John McDonald, P.E., IEEE
Program Committee Member – General Electrical & Energy Day