Exploring Engineer STEM Academy is the oldest and largest secondary school academy in the nation dedicated toward STEM careers. Now celebrating our highly successful 20th year on the campus of Georgia Institute of Technology, academy students learn all about the various 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 (70) 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 such as the American Society of Civil Engineers, Society of American Military Engineers, and the Boy Scouts of America Learning for Life/Exploring Program.

This year students explored engineering as a profession by engaging in exciting hands-on activities and experience living on the top-rated Georgia Tech campus for one week. This annual program was founded by the Georgia Engineering Foundation, Society of American Military Engineers 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 20 years, growing the academy from 10 students, to over 70 students into two concurrent STEM tracks.

The 2019 Exploring Engineer Academy was held from June 2-7, 2018 at Georgia Tech under the direct supervision of professional engineers, scientists, engineering faculty and staff from the Boy Scouts of America Atlanta Council. For More Information please visit Exploring Engineer Academy, at http://www.atlantabsa.org. The Academy’s goal for next year is to expand to 100 engineering bound students.
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.

Sunday Nite Team Building and Meet new friends.

Students team building exercises on Sunday.
EEA students ready for behind the scenes Tour by Delta Tech Ops Team Atlanta

President Scholars answer questions after dinner Tuesday Night

EEA Students engaged in an opportunity for Q/A with GT Presidential Scholars
EEA students learning about aircraft engines at Delta Tech Ops Center.

Student discussions of various fields of Engineering opportunities at Dinner with a Professional.
Experiments at the Novelis Aluminum Production Plant in Marietta, GA

Thanks to Novelis for the fantastic tour and lunch.
Tour of Lockheed Martin Aeronautical Company and “fly” latest C130J Flight Simulator

Courtesy of You Tube
Students Learning about Engineering Fast Cars at Porsche Tech Ops Center in Atlanta
Students Learning Hands-On Architectural Design and Bridge & Truss Design
EEA BRIDGE DESIGN COMPETITION
Robert J. Power Jr, M.Sc., P.E., M.ASCE
Students Listening intently to Presentations by GT College of Engineering Associate Dean Larry Jacobs and Admissions Director Rick Clark on “How to Get Into Georgia Tech”

Atlanta Falcons new Mercedes Stadium behind the scenes technical tour for EEA Students
Mercedes Stadium Home of the Atlanta Falcons

Learning about the IT production process at the Weather Channel of Atlanta
Georgia Power team teaching students about Power Storage using Chemical Reactions as well as Electromagnetic Induction and Static Electricity

Learning all about Virtual Reality Technical tours at Southern Company
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 exploring various engineering themes each day into two concurrent 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 experienced Dorm living on the Georgia Tech campus.

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
Georgia Tech Electrical and Computer Engineering Laboratories Hands On Learning with Dr Lukas Graber, Professor ECE.
Six Flags learning about Physics and Ride Designs and Early Entry to enjoy park!

EEA STEM Award Banquet with students and Key Note Speaker Tony G. Frese, Vice President Lockheed Martin Aeronautics.
A steering committee, made up of Professional Engineers, plans this annual camp and is made up of volunteers from the Atlanta Engineering community 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 STEM Academy from **May 31 – June 5, 2020**. Applications are available at [https://www.atlantabsa.org/stem-academy/](https://www.atlantabsa.org/stem-academy/) for more information please contact Richard Morales at RMorales@LBFoster.com.

EEA STEM Banquet Key Note Speakers Dr Susan E. Burns, PE, F.ASCE Georgia Tech CEE, Tony G. Frese, Vice President Lockheed Martin Aeronautics, Tracy Techau, Scout Executive, Atlanta Area Council, Boy Scouts of America with EEA Chairman Richard Morales, PE, F.ASCE and Shaukat Syed, PE, M.ASCE.
2019 Exploring Engineer Academy at Georgia Institute of Technology
June 2 – June 7, 2019

EEA Planning Committee Members

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

Aisha Stith, BSA Executive
Atlanta Area Council, Boy Scouts of America

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

Kim Mullins, EIT
Program Committee – Volunteers & Member Coordinator

Rhandy Gallegos, PE
Program Committee – Program & Badges

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

Robert J. Power Jr, P.E., M.ASCE
Program Activity – Structural Truss Analysis & Design Competition

Ashley Gravlee, Title Sponsorship
Program Committee – Novelis Aluminum

Lukas Graber, PhD, IEEE
Program Committee – GT ECE Power Laboratory

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

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

Jenny Johnson, P.E., PTOE, ITSGA
Program Committee – Georgia Intelligent Transportation Society

Kellie Sak, P.E., M.SAME
Program Committee – Society of American Military Engineers

Keith Cole, P.E. M.ASCE
Program Committee – American Society of Civil Engineers

Robert Baker Jr, P.E., GaITE
Program Committee – Georgia Institute Transportation Engineers

Jack Lindsay, P. E. IISE
Program Committee – Georgia Power & Institute of Industrial and Systems Engineers

Louis D. Young, P.E.
Program Speakers Committee

Shaukat Syed, P.E., M.ASCE
Program Committee – GA Section of American Society of Civil Engineers

Cindy Miller, P.E., M.SAME, Title Sponsorship
Program Committee – Society of American Military Engineers

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