

A Great Black Man once said, "It is easier to build strong youth than to repair broken adults" - Frederick Douglass -

STEM Tech Neighborhood Academy (STEM Tech) is a new program to provide a clean and safe after-school fun learning environment for low-income disadvantaged youth to expose them to the excitement of hands-on **Science**, **Technology**, **Engineering** and **Math** called – **STEM**.

The **STEM Tech** program is an after-school technology camp to teach hands-on technology, and serves as a social solutions resource to help mitigate youth learning issues and provide alternatives to supplement regular school academic formats. The youth work with volunteer educators and other professionals to tutor them in reading, homework help, learn study habit skills and techniques to improve class participation.

The youth also work with volunteer engineers to construct and launch model rockets, assemble Lego projects, STEM science sets and robotics kits. A first time ever opportunity happened this year for low-income underrepresented youth when a FIRST Lego Robotics Team was funded by NASA and another robotics team funded by Rockwell-Collins. The youth will also learn about basic electronics, assemble and repair computers, and use CAD software to design projects for print out on 3D printers.

They are taught to write a resume' describing their new skills to place them on a path for a good paying summer job. They will also learn how to groom and dress for success, moderate their behaviors and practice interview skills for a job and tour a business office, work shop and technology laboratory. STEM Tech teaches the youth team-work, the use of technical equipment and tools, report writing and how their school subjects are used in real life work environments. The earlier the youth are exposed to professionals and begin to practice STEM based skills, the sooner they will improve their chance of becoming better students, growing into successful adults and good citizens on track for good paying STEM jobs and improve lifestyle.

STEM Tech is physically located within low-income neighborhoods for ease of access to a series of fun action-packed STEM learning activities after-school when it is most critical to deter underrepresented youth from becoming susceptible to criminal activity during unsupervised periods between the hours of 3pm to 9pm.

Partnerships are critical for the success of the STEM Tech initiative. Our partners include the "Housing Authority of Brevard County" who provides the building (rent & utilities free), use of office equipment and furniture and a paid staff to assist with STEM Tech operations where 127 disadvantage youth live in very low income families. Other partners are NASA Education Projects and Youth Engagement Office, Rockwell-Collins Corporation, Eastern Florida State College, IGT Technology Corporation, and Lowe's Home Improvement Stores. These partners provide funding support to purchase STEM technical learning systems, landscaping & building renovations, volunteer college students, faculty and technical professionals, and other collaborative support to the STEM Tech program.