WILSON
Education Foundation

EDUCATIONAL IMPROVEMENT TAX CREDIT FUNDING

WILSON HIGH SCHOOL STEM ACADEMY

A stand-alone integrated STEM experience for students where content is driven by an application based approach. Content from all subject areas, taught in conjunction with one another, drive the exploratory nature of the student experience, leading to an increase in a student's ability to problem solve and critically think. The project based integrated curriculum with research projects has become a staple that the community has embraced. By engaging community members who volunteer their time to collaborate with our program and lend their expertise in the fields of science, engineering, and business we seek to further our culture of mentorship through entrepreneurship. Our ISTEM courses are ever evolving. The integrated approach to this course will assure that students are prepared for the rigors of high school, college or trade, or occupation. Sample projects include: catapult design through pumpkin chuckin', material testing, truss bridge design, arduino control systems, infectious disease transmission, rube goldberg system design. The District has developed and implemented a STEM-related program for students, which is designed to meet the demands of the workforce by emphasizing problem-solving, critical thinking, and communication skills. Professionals in the local community serve as advisors to STEM students as they develop these skills and potentially provide Engineering and Science Internships.
For more information visit www.wilsonsd.org

I-STEM GOALS

- Identify a problem worthy of investigating
- Clearly articulate purpose/goal of any problem/challenge/scenario
- Collect, synthesize, and present background information from credible sources pertaining to any problem/challenge/scenario
- Design experiment(s) that clearly identify independent, dependent, and controlled variables within criteria and constraints
- Create a functional prototype aimed at solving the problem
- Observe and communicate results including testing data in both a numerical and graphical form
- Analytically discuss shortcomings, successes, and future design