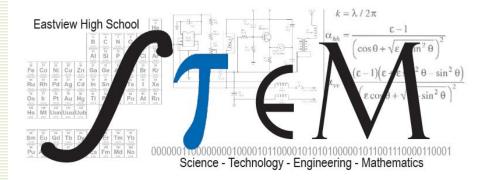
## Eastview STEM Scholar Certificate Program

This academic certificate program began with the 2011-2012 registration. Our first *STEM* Scholars will graduate in 2012.

We are excited to continue to grow our strong comprehensive and college preparatory learning with a 21<sup>st</sup> Century focus; imbedding the ISD 196 Frameworks, the MCA and ACT Standards and modeled to the criteria of the NSTA, NCTM, ITEEA, and the ABET.

Employment in science, math and engineering will increase about 70% faster than the rate for all occupations.

~U.S Bureau of Labor Statistics, 2010



## FALL 2011-2012

**The Eastview STEM Scholar Programs of Study** includes four years of Math, Science, English, and Social Studies and will include three Scholar Certificate Options (*Pathways to an Engineering Career, College Prep and Honors College Prep*). Eastview High School and several engineering support organizations (ESO) will offer 4 financial STEM scholarships for students completing a STEM Certificate:

- 1.) Exceptional STEM student engaging in engineering education,
- 2.) Female: Student engaging in a training program in the area of STEM,
- 3.) Male: Student engaging in a training program in the area of STEM,
- 4.) Student of Color: engaging in a training program in the area of STEM.

Our current engineering courses create the foundation (*eye of the storm*); College Prep Engineering, Engineering I and Engineering II, Aerospace Technologies, Communications Technologies, Power & Energy Technologies, Robotics, Technological Design and Problems Solving, Multi-media Design.

Career Development Program (Aviation, CAD, CISCO Networking, Computer Hardware/Software, Animation), Mentor Program (Engineering Related Career), Work Program (Engineering Related) – DCTC Nanotechnology.

An 11<sup>th</sup> grade 2x2 team integrating *Chemistry*, *Algebra II from an Engineering Perspective* will also perpetuate the European Cyclical Scientific Process.

The Eastview STEM Steering Team will conduct a continuous improvement development process as well as productivity data analysis for the internal program as well as market opportunities (university and technical options).

## Simulations provide the instructional methodology foundation.

A simulation stimulates active engagement of students. They are playing a role, not just reading and analyzing. They make decisions and see the results of their decisions in the response of other players and the outcome of the simulation.

With simulations, students can explore the impact of multiple decisions at the same time.

A simulation engages students to synthesize and integrate what they read and make actual decisions based on facts or data presented in the case. Simulations give students a temporal dimension, an opportunity to experience outcomes that change based on their inputs over time.