

**2014
AWARD
WINNER**

EXCELLENCE IN ACTION

Science, Technology, Engineering & Mathematics CAREER CLUSTER

STEM Innovation Academy Foy H. Moody High School

The Innovation Academy for Engineering, Environmental, and Marine Sciences is one of only 56 T-STEM Academies in Texas. A Project Lead the Way Model Engineering School, the Innovation Academy is a magnet program within a traditional high school that serves Moody High students alongside others from across the Corpus Christi ISD.

The STEM Innovation Academy has been in operation for five years. It offers advanced STEM courses and experience preparing students for a STEM focused post-secondary pathway. Students are selected through a lottery process based on their interest in pursuing a rigorous college- and career-preparatory program in science, technology, engineering and/or mathematics.

The academy offers ongoing guidance that targets each student's plan of study, as well as mentoring and internship opportunities through its community and higher education partners.

"We consider it a privilege to support an impressive group of students at the Innovation Academy. Their achievements are a testament to the administration and teachers' commitments to their success. Our support of STEM programming is rooted in our workforce development goals as we strive to develop the talent and skills we seek in future employees."

-Mark Avelar, Gov't and Public Affairs
CITGO Corpus Christi Refinery

Fast Facts

Students Served (2013)	276
Male : Female	52 : 48
Low-Income Students	86%
Max Postsecondary Credit Possible	30+ hrs
Graduation Rate	100%
Graduates Who Enrolled in Post-Secondary	78%
Graduates Who Entered Workforce/Military	15%

Partnerships

CITGO Corpus Christi Refinery
Texas A&M University System
Gulf Coast Foundation
Texas Marine & Science Institute
Del Mar College
Project Lead the Way
Skills USA



More on STEM Innovation Academy: <http://moody.ccisd.us/>

More on CTE: <http://careertech.org>

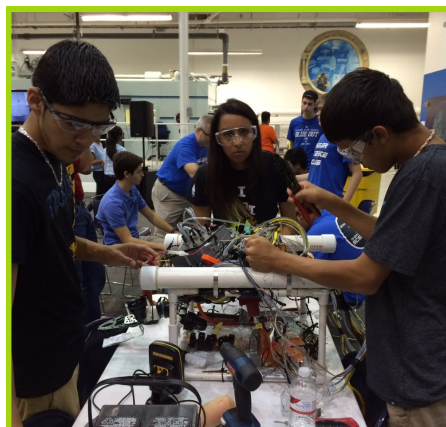


STEM Innovation Academy students win the Texas State Applied Engineering SkillsUSA competition

Diverse Experiences

Introduction to Engineering Design exposes students to 3D design, using cross-curricular concepts. The program requires research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation.

Students are also expected to present to their teachers and peers on their project planning, methodology and results throughout the development process.



Students ready their underwater robot for MATE state competition at NASA's Neutral Buoyancy Lab

The STEM Innovation Academy Approach

The STEM Innovation Academy targets students from low-income and high-minority demographics who are accepted through a lottery system that is not tied to academic achievement. Students follow programs of study that typically entail pre-Advanced Placement (AP), AP, dual credit and articulated college credit. With an eye to the future, the STEM Innovation Academy has recently tripled dual credit course offerings on campus, and experienced enrollments in dual credit courses have tripled — enrollment has ballooned from 75 students three years ago to 272 in the upcoming school year.

Emphasizing hands-on learning, students take part in overnight camps and summer bridge learning opportunities. Focused on increasing students' understanding of the natural world by exposing them to the dynamics and socioeconomic effects of their local natural resources.

Much of Moody's student support services are made possible through their close partnership with CITGO Corpus Christi Refinery. As program partners, CITGO provides financial support for unique learning experiences, including students attending NASA's Neutral Buoyancy Laboratory Underwater Robotics Competition, marine ecology field experiments, college visits and scholarships for graduating STEM Innovation Academy students looking to continue on to postsecondary study. Through this program support, students have the opportunity to conduct and present research, visit major colleges and universities, participate in co-curricular academic competitions, and visit with world-famous scientists and STEM representatives.

The academy provides high-quality career counseling services, with a dedicated academic advisor who helps students concentrate on long-term learning goals, offering prescriptive advice to build a pathway from secondary to postsecondary study and beyond. All incoming 9th graders are required to attend a summer Academy orientation.

The T-STEM program requires parental involvement to be a component of the Innovation Academy. The "Viking Project" Pilot entails on-campus parent trainings and meetings in collaboration with Del Mar College counselors to inform parents and students of their career and postsecondary options. Parent symposiums, an active PTA and the Innovation Academy Academic Booster Club keep parents engaged in their children's learning from orientation to graduation.

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