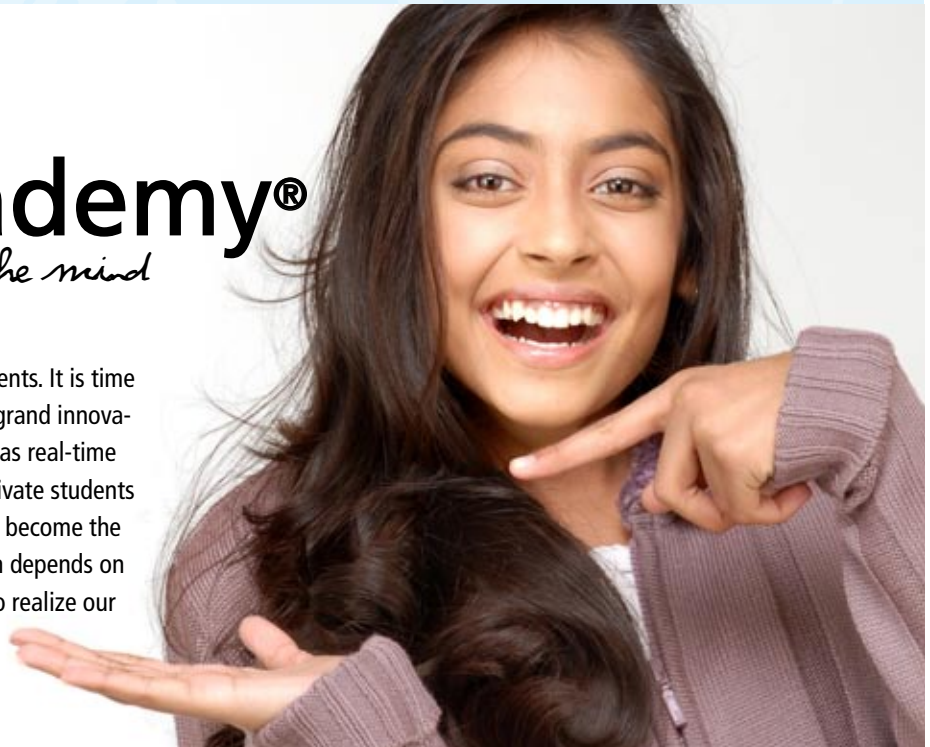


the **STEM** academy®

establishing engineering habits of the mind

It is time for 21st century STEM education to include all students. It is time for 21st century STEM curriculum to engage students in the grand innovation challenges of our day. It is time for curriculum to evolve as real-time STEM education advancements are realized. It is time to cultivate students who are more than compliant. It is time for more students to become the next generation of problem solvers. The success of our nation depends on our innovative capacity and all voices must be represented to realize our potential. It is time for The STEM Academy.



21st Century STEM Education

Academic Model Leader

The STEM Academy is a national non-profit organization dedicated to improving STEM literacy for all students and features an innovative curriculum delivery system which allows for the real-time integration of advancements in STEM education. To realize the potential of 21st century education, the academic model must embrace modern methods for communication and accessing of information. There was a time when printed textbooks and trips to the library were relevant. In a 21st century academic model printed textbooks represent outdated information and budget which could be allocated elsewhere. Online social networking and mobile devices have forever altered the landscape of communication. This development combined with the information available on the internet, has created a 21st century learner who expects accessible learning options and instant feedback.

The STEM Academy's innovative Learning Management System (LMS) allows students to access curriculum content from any web-enabled device and get instant feedback to assessments-results which are captured by our student outcome management system within the LMS. Instructors can easily communicate with students via online forums within the LMS and allow students to exchange ideas and / or mentor other students. The STEM Academy curriculum is intended to be instructor led in the classroom, but can accommodate online learning environments. Instructors have access to our National Professional Learning Community via web portal for identifying best-practices, contributing to curriculum innovation as well as getting responses to questions. As our national network of participating instructors and educator led development team identify new practices and content, it can be integrated into our curriculum and deployed to the national network with the click of the mouse. *The STEM Academy is the 21st Century STEM Education Academic Model Leader.*

21st Century STEM Education

Academic Model Leader

CURRICULUM VALIDATION

The American Society of Engineering Educators (ASEE) recognizes The STEM Academy as a national next generation, high impact K-12 academic model. National Action Council for Minorities in Engineering (NACME) qualified The STEM Academy curriculum for national recommendation as representing a best practices K-12 academic model. National Academy Foundation (NAF) qualified and then selected The STEM Academy as curriculum provider to their Academy of Engineering (AOE) program. Third party validation of our curriculum and academic philosophy is critical to our ability to impact student performance. These endorsements solidify our status as a recognized national leader in 21st century STEM education.

The practices, strategies and programming utilized within The STEM Academy (K-12 Program) are built upon a foundation of identified national best practices which are designed to improve under-represented minority and low-income student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates and improve teacher and principal effectiveness. The curriculum is rigorous, innovative and was collaboratively developed by K-12 teachers, university educators, industry partners, engineering and biomedical professionals. The curriculum maps to state and national standards, and culminates with students applying real-world application of their STEM education with hand-on activities.



By selecting The STEM Academy, your school is choosing to impact student participation and achievement right away. Your school, via our Learning Management System, will be capturing actionable, research based data which will foster improved planning for students, teachers and administrators. We look forward to welcoming your instructors to our National Professional Learning Community. Following orientation training we will together select a date for your banner raising event. Invitations will be sent out to local political, education and industry leaders as well as news media outlets. The banner raising will announce your school's commitment to improve STEM literacy for all students and create community awareness. This event can be the catalyst for the expansion or establishment of the program advisory committee and kick off school participation in Engineering Projects in Community Service (EPICS).