



TEN80 STEM EXPO

Boise, ID * Thurs, Oct. 9, 2014

The National STEM League (NSL) is a practice league for future professionals that has recently been named one of four Exemplary and Scalable STEM programs by Change the Equation.

Thanks to sponsorship from the U.S. Army, you are invited to the one-day STEM Expo on Oct. 9, 2014 at the (venue tentative) Joint District Service Center's East End Training Facility in Meridian, ID near Boise that highlights project-based curriculum from the NSL and engages high school students and educators in concepts and careers ranging from race engineering to software+hardware innovation.

STEM Expo attendees are eligible to activate the full sponsorship and bring the NSL to their schools for sustained project-based learning that doesn't forget the learning! Depending on the challenge you choose, full sponsorship includes up to \$4,000 worth of non-consumable materials, STEM curriculum for clubs, camps or courses, training and entry into the 2014-15 National STEM League. Competition is optional. Collaboration and Creativity required!

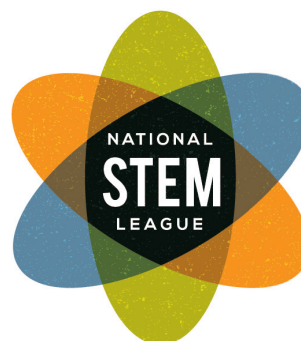
Download the one-page application or email info@ten80education.com to reserve your school's space.

Expo Details & Highlights

- Thursday, 9 October 2014 from 9:15 AM - 1:30 PM
- Location: (Tentative) Joint District Service Center's East End Training Facility in Meridian, ID
- Transportation: Bussing stipend available upon request
- Lunch provided
- Participants will learn how ALL students can engage in STEM through Ten80's National STEM League and join workshops featuring 3-D CAD and printing, race engineering, robotics and the language of computers and code.

GET INVOLVED

Ten80Education.com
Toll free 855-836-8033
info@Ten80Education.com



ARMY STRONG.®

NATIONAL STEM LEAGUE

Project Based Learning that Doesn't Forget the Learning

The National STEM League (NSL) is a practice league for future professionals that has recently been named one of four Exemplary and Scalable STEM[†] programs by Change the Equation[‡]. Students in middle and high school are invited to own their own team or business that specializes in and competes in one of the following challenges. A single school or organization can participate in one or all of them.

Rover and Racing teams compete in head-to-head competition or time trials. All NSL teams engage in three activities which are fundamental to the success of most businesses and organizations. They get and stay ahead through research and development (Data-Driven Design), manage and market themselves (Enterprise) and enrich their communities (Community Outreach).

CHALLENGE	CURRICULUM - ALL CHALLENGES INCLUDE THE ENTERPRISE GUIDE
	Engineer a 1:10 scale electric RC car that is fast and handles well. Compete in time trials and head-to-head races on road courses, oval superspeedways and drag strips. Scope & Sequences for: • FULL YEAR AFTER-SCHOOL CLUB (WEEKLY 90 MINUTE SESSIONS) • FULL YEAR STEM ELECTIVE (DAILY 50 MINUTE SESSION) • SUMMER CAMP (30 CONTACT HOURS) • 6 - 10 WEEK MODULES IN RACE ENGINEERING, AERODYNAMIC DESIGN WITH 3-D CAD, RENEWABLE ENERGIES
	Teach an open source rover robot to navigate and map a maze. Build a strategy based on your team's strengths. In 2015, teach the rover to teach an unmanned aerial vehicle! • 6 WEEK UNIT (30 CONTACT HOURS) THAT ADDRESSES CONCEPTS FROM BINARY CODE TO THE ALGEBRA BEHIND TURNS.
	Evaluate an energy-related issue. Engineer a solution with a balanced energy budget • 6 WEEK UNIT (30 CONTACT HOURS) IN EVALUATING AMBIENT CONDITIONS AND CREATING MATH MODELS TO DESIGN AN EFFICIENT RENEWABLE ENERGY CHARGING STATION IN YOUR LOCATION.
	Combine software and hardware to create something new (even if it is just new to you!). • A VARIETY OF ACTIVITIES THAT ILLUMINATE CONCEPTS AND SKILLS BEHIND COMBINING SOFTWARE AND HARDWARE TO MAKE YOUR IDEAS INTO A REALITY.

Each challenge provides curriculum aligned to the Common Core and NGSS cross-cutting concepts. The curriculum can be implemented in math, science, STEM courses, clubs and camps. Through Ten80's website, students can share their work for feedback from STEM professionals, share ideas with other teams and swap assets such as 3-D printer time or CAD files.

GET INVOLVED

Ten80Education.com
Toll free 855-836-8033
info@Ten80Education.com

[†] STEM = Science, Technology, Engineering & Mathematics

[‡] Read more about Change the Equation at ChangetheEquation.org. The Student Racing Challenge is now called the National STEM League.

