Course: CS-1A:
In the Computer Science Challenge (CS-1A) students develop fundamental computer models through simulation and computer programming. Students utilize problem solving skills and computational thinking to develop coding practices that are universal across software languages. Students will understand algorithms, binary and hexadecimal number systems, data types, decision loops, functions, sensors, and wireless communications that are critical concepts in engineering and computer science. After mastering software and hardware, including basic circuitry lessons, the final challenge is to build an Arduino based personal navigator which helps pedestrians navigate their environment.

Course: CS-1B:
In the Rover Challenge (CS-1B), students optimize code and design a Rover robot to autonomously navigate courses paralleling real life operations in remote areas of land, sea, and space. If combined with the Rover Curriculum (CS-1B), the two courses provide a full year of CS bridging engineering design and computer science with business modeling and real world applications. Software to hardware integration and interoperability are the key. Computer Science, Engineering, and Enterprise support growth in goal-setting, job responsibilities, and career preparedness.

Curriculum Features
- Full Semester Computer Science Curriculum
- Curriculum outlines for integration into the classroom or club
- Teacher Lesson Plans Guiding Student Investigations
- Student Assessments for Each Unit (online, self-grading or print out)
- Final Engineering Design Project, Arduino based
- Software and Hardware Integration. Understand Sensors and Reacting to Changing Conditions in your Code
- Mapped to MA VCTE, NGSS, CC, and CSTA Level 3

For more course details, contact MJ Smith mjsmith@ten80education.com (855) 836-8033, EXT 1.
Attend an introductory webinar: http://www.ten80education.com/events/

Ten80 Education Inc. 26F Congress Ave, Saratoga Springs, NY 12866
www.ten80education.com / info@ten80education.com / 855-836-8033