



KEY DATES

September 21:
Applications due

September 27:
Notification
of acceptance
by e-mail

October 2
Tuition is due

October 2 and 6
Classes start

Apply on-line at
www.starschallenge.org

Questions:
(732) 609-2797

Mission

The Stars Challenge is a science enrichment program for top 6th, 7th, and 8th graders that began in 2006. Our goal is to involve more middle school students in science and technology. Developing top notch scientists, engineers, and mathematicians is critical to maintaining America's lead in technology and innovation.

Our goal is to nurture students' passion and curiosity about science. We start with excellent teachers who lead creative, hands-on classes. Working in small teams, students tackle real world problems and see how they can make a positive impact on society through science and technology.

Fall 2018 Courses

For 6th graders who love to solve mysteries we will be offering our popular **Forensics** course. It will be taught by Ms. Carleigh Engstrom and Ms. Aimée Babbin.



Students explore the security features on different denominations of US money.

Ms. Burich of the NJ Sea Grant Consortium will be leading 6th and 7th graders in their investigations of the marine, coastal, and estuarine habitats of the New Jersey shoreline

in **Explore Our Shore Like Never Before**. You'll get to know first-hand some of the unique marine life of the Jersey Shore.



Students design, build, and test underwater remotely-operated vehicles in Explore our Shore.

For 7th and 8th graders, we're offering **Coding and Robotics** by Mr. Chris Hanas. It will be a hands-on adventure into the worlds of computing and robotics. You will be exposed to fundamental coding methods which you will use to control a VEX robot and an Arduino prototyping board. You need to be curious and interested in exploring.

7th and 8th graders will be using their creativity and knowledge of physical science to design and build the winning solution to the challenges Mr. Valente will bring to **Olympics of the Mind**.

Fall 2018 Logistics

Classes typically meet from 6 p.m. to 8 p.m. for 10 weeks beginning in early October. Exact times and locations are on the reverse side. Tuition is \$500. Some needs-based scholarships are available. Please see our web site, www.starschallenge.org, for more details and to use our on-line application.

FORENSICS - 6TH GRADE

Did you ever wonder how investigators solve crimes? Do you enjoy watching episodes of CSI? Well, this course is for students who love solving mysteries. Each session will provide students an opportunity to build investigative skills and work like a crime scene investigator. Students take active roles as characters in the mysteries. Student-sleuths will analyze physical evidence and debate possible hypotheses. We will learn how to use evidence to reconstruct a crime scene. Labs will show students how to analyze lipstick samples, fiber samples, and mystery powders. If mysteries have always intrigued you, and you would rather be actively solving them than just reading about them, then this forensics course is perfect for you. This course will be taught by Ms. Carleigh Engstrom of Biotech High School and Ms. Aimée Babbín of High Technology High School on Tuesday evenings from 6 to 8 at High Technology High School beginning October 2.

EXPLORE OUR SHORE LIKE NEVER BEFORE - 6TH and 7TH GRADE

Summer may be over but you can still enjoy the beach and learn much more about it. This course provides hands-on and minds-on investigations of the marine, coastal and estuarine habitats of the New Jersey shoreline. For example, have you ever wondered why waves push your surfboard forward or how rip currents form? You'll get to know first-hand some of the unique marine life of the Jersey Shore from plankton to crabs, fish, reptiles and mollusks. You will also participate in several dissections. We'll meet at Sandy Hook on Saturdays where you will participate in hands-on investigations of the park's salt marsh, barrier beach, and maritime forest environments. This course will be taught by Ms. Diana Burich of the NJ Sea Grant Consortium at Sandy Hook. Classes will meet Saturdays from 9 am to 12 noon at the NJ Sea Grant Consortium building on Sandy Hook beginning October 6.

CODING AND ROBOTICS - 7TH and 8TH GRADE

This course will be a hands-on adventure into the world of coding and how those concepts relate to robotics. You will be exposed to fundamental coding methods using both MIT Scratch and Python. We will then make use of those skills to control an Arduino prototyping board, various VEX robotics sensors, and a VEX robot. Finally, you will be able to use the skills learned to develop your own Scratch, Python, Arduino or VEX project. This course will be taught by Mr. Chris Hanas of High Technology High School on Tuesday evenings from 6 to 8 at High Technology High School beginning October 2.

OLYMPICS OF THE MIND - 7TH and 8TH GRADE

Creativity is the name of the game in this course! With your newly made friends, you'll use your creativity and knowledge of physical science to create solutions to design challenges. For example, one challenge will be to build a memorial tower to commemorate the 150th anniversary of the founding of your town. You'll need to design your tower out of a single sheet of copy paper. Winning towers typically reach heights greater than six feet! Another challenge is pulling your 5 year old daughter up out of a well using only wind power. Will your team win the challenge? This is your opportunity to innovate – to explore. This is Olympics for the mind! This course will be taught by Mr. John Valente of the Marine Academy of Science and Technology (MAST). Classes will meet on Tuesday evenings from 6 to 8 PM beginning October 2 at High Technology High School.