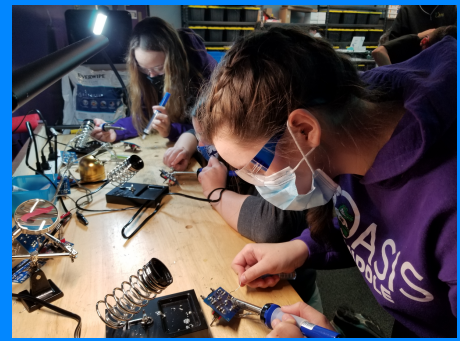


STEM ELECTIVES

Why should I sign-up for a STEM elective?

- No Previous Experience Needed
- Hands-On Learning & Collaboration
- Design Thinking & Problem Solving
- Fun Design Challenges with Real-World Applications



6TH GRADE STEM

All 6th grade students will automatically be enrolled in this dynamic design thinking class! This introductory STEM elective includes; project based learning in structural engineering, programming & coding, electric circuits, roller coaster design and 3D design.

7TH GRADE STEM OPTIONS:

CYBERSECURITY

Oasis middle is ONE OF ONLY 5 SCHOOLS in the NATION chosen to pilot this new CTA-designated course! Students in this elective will be introduced to IT fundamentals and artificial intelligence as well as augmented and virtual reality. They will also utilize Microbit technology and coding to solve real-world problems.

8TH GRADE STEM OPTIONS:

BIOMEDICAL ENGINEERING & FORENSICS

This elective enables students to better understand the design and construction aspects of 3D printed prosthetics. Participants will also practice skills used by forensic scientists to solve crimes.

CRIME SCENE

MARITIME ENGINEERING

Students who chose this STEM elective will learn how remotely operated underwater vehicles are used in a marine environment. Teams will work collaboratively to build and operate a Seaperch vehicle. Students will learn about buoyancy, ballast control, develop scale drawing and construct full size cardboard boat.

GREEN ARCHITECTURE & SUSTAINABLE DESIGN

This course introduces students to green architecture, environmental engineering, and sustainable architectural design options. Students will develop solutions for environmental problems which include management of renewable resources.

ROBOTICS

Students taking this STEM elective will utilize VEX IQ robotic kits to build, program, and operate robots. Participants will also learn how to incorporate motors, gears, and sensors to complete tasks and solve problems.

DRONES

In this elective, students will work in teams to construct a working drone. Teams will also have the opportunity to redesign and 3D print the drone frame as well as learn to program the drone to fly autonomously.