



CHATHAM MARCONI MARITIME CENTER



## Chatham Marconi Maritime Center Winter STEM Events

**EGGHEAD HELMET CHALLENGE:** Calling students, parents, and innovators of all ages! This is an event for families on Saturday, January 28, 2017 from 1-3PM with rolling start times each  $\frac{1}{2}$  hour. Design a helmet for an egg and engage in the steps of the engineering and design process in this STEM challenge sponsored by the Chatham Marconi Maritime Center, Atlantic White Shark Conservancy, and the Cape Cod STEM Network. This is a FREE event and commences a monthly STEM Saturday event to be hosted through the collaboration of the Atlantic White Shark Conservancy and the Chatham Marconi Maritime Center.

**INTRODUCTION TO CODING AND ROBOTS:** Grades 5-12. Saturday, February 4, 2017. 9AM-2PM. Meet EV3 - our newest robot from the engineers at Lego! Your goal will be to help develop the prototype for a driverless vehicle. You will practice coding, learn about driverless cars, then build an EV3 vehicle. Learn to move and make simple turns, which increase in complexity to three-point turns and reverse driving challenges. This is just the beginning of your EV3 adventure! Dress for the weather and bring a lunch/snack/drink. COST: \$50

**FEBRUARY VACATION MORNING STEM ADVENTURE:** Grades 3-7. Tuesday, Wednesday, Thursday, February 21-23, 2017. 9AM-12PM. Engage in a variety of technical activities focused on vehicles. Students will use Lego Mindstorm NXTs and hydrogen fuel cell cars to explore the future of the automobile industry. COST: \$100 for this three-day session.

**FEBRUARY VACATION AFTERNOON STEM ADVENTURE: Grades 7-12. Tuesday, Wednesday, Thursday, February 21-23, 2017. 12:30-3:30PM. The driverless car: Imagine a world where cars don't need drivers! Go to and from your daily activities with a robot brain for a chauffeur! You will build an EV3 robot vehicle, then face programming challenges including the three point turn, reverse, lighting, navigation, keyless start, and cruise control. Students who attend the introductory class on February 4 will have a start on this week's challenges, and if they register for both classes, they will leave their vehicle intact on February 4. Completion of all challenges may take up to 40 hours of progressively advanced coding, so this class is for beginners or experienced students. COST \$100 for this three-day session.**

**APRIL VACATION MORNING STEM ADVENTURE: Grades 7-12. Tuesday, Wednesday, Thursday, April 18-20, 2017. 9AM-12PM. The driverless car, continued. Begin designing your autonomous vehicle or continue your progress from your February session. Students who begin in February will have a start on the program challenges, and if they register for both vacation classes, they will leave their vehicles intact at the end of February vacation. Completion of all challenges may take up to 40 hours of progressively advanced coding, so this class is for beginners or experienced students. COST \$100 for this three-day session.**

**APRIL VACATION AFTERNOON STEM ADVENTURE: Grades 3-7. Tuesday, Wednesday, Thursday, April 18-20, 2017. 12:30-3:30PM. Engage in a variety of experiments and activities focused on chemical and physical changes. Want to make glow sticks brighter? Fascinated by slimes, ooblek, and non-Newtonian fluids? Temperature change? Colors? You will love the creativity and chemical engineering of this class! COST \$100 for this three-day session.**

**Email [cmmcsummerstem@gmail.com](mailto:cmmcsummerstem@gmail.com) for a registration form today!**

***POLICIES: Classes may be canceled due to low enrollment. Workshop enrollment is non-refundable unless a one week notice is provided by email before the date of the workshop. A \$30 processing fee is applied to cancellations. CMMC is not set up for one-to-one or assistive instruction and parents will not be able to monitor needs. Emergency medical permit, publicity release, and code of conduct must be signed at registration. CMMC will not be held responsible for injuries sustained during a CMMC course and parents/guardians are responsible for replacement costs or damage repair to CMMC property if incurred.***