

# EXPLORE LEARN CREATE VIRTUAL STEM ACADEMY

FOR YOUTH DEVELOPMENT®
FOR HEALTHY LIVING
FOR SOCIAL RESPONSIBILITY



Check out our new one day programs! Participants will engage in a wide range of STEM topics that vary per day. This is a perfect program for any school age child including homeschool and distance learning students! Prior to the program, a Google Meet Code will be shared with registered participants.

Day/Time: Thursdays 4:30 to 5:30 p.m.

Cost: \$15 per class

## HOUR OF CODE! December 10, 2020

Celebrate Computer Science Week with an Hour of Coding presented by CT STEM Academy. Participants will engage in coding related activities. Participants will walk away with knowledge of two to three websites that they can continue to explore after our session.

## **EXPLORE STEM CAREERS December 17, 2020**

Participants will explore all types of STEM Careers through CT STEM Academy's engaging Careers In STEM website. Participants will walk away with an understanding of skills needed in various STEM Careers.

## PAPER STRAW ROCKETS January 14, 2021

Participants will create a paper straw rocket out of household materials such as paper, straws, and tape. Materials will need to be provided by families. Each child should have two regular size straws, clear tape, scissors and three index cards.

## **HOOP GLIDERS January 21, 2021**

Participants will create a glider out of household materials such as paper, straws, and tape. Materials will need to be provided by families. Each child should have two regular size straws, clear tape, scissors and three index cards.

## **VEXCODE VR January 28, 2021**

VEXcode VR lets you code a virtual robot using a block based coding environment powered by Scratch Blocks. VEXcode VR is based on VEXcode, the same programming environment used for VEX 123, GO, IQ and V5 robots. We all know that robots make Computer Science (CS) come to life with real world applications.

## STRAW EGG DROP CHALLENGE February 4, 2021

Participants will create a protective covering/device to prevent an egg from breaking during an egg drop test. Families will need to provide up to 50 plastic non-flexible straws, one meter of masking tape, scissors, ziploc bag, plate or tin for workspace and one raw egg.

110 West Main Street Meriden CT 06451 203 235 6386 www.nbbymca.org





## EXPLORE LEARN CREATE

## VIRTUAL STEM ACADEMY CLASSES

(SCIENCE, TECHNOLOGY, ENGINEERING & MATH)

Are you interested in preparing your kids for the future? Sign up for our STEM programs and spark your child's creativity and empower their inner engineer.

### **GO FOR THE GOLD WITH OZOBOTS**

Ozobot is a robotic platform that empowers coding & STEAM education for participants. Participants will learn two ways to code with and without screens. This program will be led by an experienced STEM educator and participants keep their robot! Please note that this program will require participants to pick up their ozobot the week of January 4, 2021. Prior to the program, a Google Meet Code will be shared with registered participants. Participants may pick up their materials between January 11 – 13. Registration will close on December 31, 2020 for this program.

Ages: 8-14 years old

Day/Dates: Wednesdays 1/13, 1/20, 1/27, 2/3, 2/10

Time: 6:00 to 7:00 p.m.

This will be taught online via Google Meet

Fee: \$150 (includes robot)
Register at the Meriden YMCA



## **VEXCODE VR PYTHON**

VEXcode with Python participants will create a project, test the project, make revisions and retest the project. Come join us for this engaging form of coding. Prior to the program, a Google Meet Code will be shared with registered participants. There is no additional materials kit required for this program. The program instructor will be Hassan Bourhrous. Hassan is a STEM educator who specializes in technology education and an internationally experienced educator.

Ages: 10-15

Day/Dates: Thursdays 1/14, 1/21, 1/28

Time: 6:00 to 7:00 p.m.

Location: Online via Google Meet

Cost: \$35





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#### **CODING AND ONLINE ROBOTICS CLUB I**

his program is designed for participants who would like a rich introduction to coding. This program encourages critical thinking, problem solving, and communication. Participants will be using a variety of block coding websites to learn the basics of coding and related STEM applications. Instructors will adjust program instruction to meet the needs of all participants. No additional materials are required for this program.

Ages 8 - 14

Tuesdays: 1/12, 1/19, 1/26, 2/2

Time: 6:00 to 7:00

Location: Online via Google Meet

Cost: \$40

#### **CHEMISTRY CREATIONS**

Explore a different side of STEM with this new program. As junior chemists, students will study the substances that make up matter—everything that takes up space in the universe. They also study the changes that take place when substances are combined. These changes are called chemical reactions. Participants who join will have the chance to see how the properties of substances can make for exciting projects that might include chemical testing and allergy free food chemistry. We have also included new topics to explore. A kit of supplies will be provided to each participant. Please note that this program will require participants to pick up their kit prior to the program. Participants may pick up their materials on February 10, 11 or 16th. Additionally, a Google Meet Code will be shared with registered participants prior to the program. The program instructor will be Ruby Hsu. Ruby is a STEM educator, past Wallingford Teacher of the Year, and internationally experienced educator.

Ages 9 - 14

Tuesdays: 2/16 and 2/23 Time: 6:15 to 7:30 p.m.

Location: Online via Google Meet

Cost: \$30