

CT STEM ACADEMY SATURDAY AND EVENING PROGRAMS Fall 2022 and Winter 2023 Sessions



Wallingford VEX IQ Robotics **Competition Team**

Course Number 2005.401 Ages 10-13

Location: Spanish Community of Wallingford

Join us for another successful season of our VEX IQ robotics competition team. Let's go to World Championships again! Students can rejoin from the previous year, but we also welcome new faces. No experience necessary. This program is high commitment and high reward. It encourages teamwork, problem solving, and leadership skills.

The students will be using the **VEX IQ** robotics system to learn the basics of building a robot, coding and other STEM applications. Fee: \$350 includes all meetings, t-shirt for participants and registration fees for all scrimmages and State Competition.

Meeting Dates and Times

All meetings are 9 a.m. to 12 p.m. on Saturdays. Meeting dates are as follows:

10/1, 10/8, 10/15, 10/22, 10/29, 11/5, 11/12, 11/19, 12/3, 12/10, 12/17, 1/7, 1/14, 1/21, 1/28, 2/4, 2/11, 2/25, 3/4, 3/11

TBD: Additional practices prior to competitions, scrimmages, competitions and End of Year Meeting following State Competition Please check the Wallingford Park and Rec website www.wallingfordrec.com and www.ctstemacademy.ora for the most current information.



information, can be found on

wallingfordrec.com, www.ctstemacademy.org and on Facebook and Twitter @ctstem All registration is online at wallingfordrec.com



CT STEM ACADEMY

284 Washington Street 203.294.2175 | info@ctstemacademy.org | www.ctstemacademy.org

Wednesday Night Science Fun Course Number 2005. **Ages 8-12** Wednesdays - See Selected Dates Below 6:15 - 7:15 p.m.

Location:

Outdoors @ Community Lake Pavilion

There's nothing like some science to kick off the weekend! Wednesday programs will involve exciting projects for students to burn off some of that built up energy from the week. Activities will include exciting and engaging STEM labs for kids to collaborate on. If inclement weather, program will be moved to Wallingford Park and Rec STEM Room.

Cost: \$15 per session

Wednesday, September 21- Chemistry 2005.426 Participants will engage in a fun hands-on chemistry experiment.

Wednesday, September 28 - Roller Coasters 2005.427 Participants will envision and design a paper roller coaster.

Wednesday, October 5 - Tallest Tower Challenge 2005.428 Participants will try to build the tallest tower out of household materials.

Wednesday, October 12 - Make and Take STEM 2005.429 Participants will engage in a surprise STEM engineering challenge.

Wednesday, October 19 - Water Bottle Toss Challenge

Students will test a variety of bottles by filling them with water and tossing / flipping them to determine which bottle of theirs has the highest success rate.

Wednesday, October 26 - Fidget Spinner Challenge

Students will develop by conducting experiments on a spinning technique that they develop with a team. Participants will be Additional Winter and Spring and Summer STEM Camp looking into human error, spin speed, and will be recording and comparing spin times.

> Wednesday, November 2 - Race Car Challenge 2005.432 Participants will create race cars using everything from straws, peppermints and K'NEX.

Wednesday, November 9 - Basketball Hoop Challenge 2005.433

Participants will create a mini-basketball game out of household materials.



CT STEM ACADEMY Fall 2022 and Winter 2023 Programs





Ages 5 and 6 STEM (NEW Topics)
Course Number 2005.407
Tuesdays: 10/18, 10/25, 11/1, 11/8
Time 6:15 p.m. to 7:30 p.m.
Location: Wallingford Parks and Rec STEM Room
Cost: \$38

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations. Our session will include high interest materials that will include science, technology, art and math! Maximum Number will be 10 participants

Ages 5 and 6 STEM (NEW Topics)
Course Number 2005.107
Thursdays: 1/5, 1/12, 1/19, 1/26
Time 6:15 p.m. to 7:30 p.m.
Location: Wallingford Parks and Rec STEM Room
Cost: \$38

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations. Our session will include high interest materials that will include science, technology, art and math! Maximum Number will be 10 participants

Chemistry Creations *New Topics*
Course Number 2005.112
Ages 9 - 14
Tuesdays: 2/7 and 2/14

Time: 6:15 to 7:30 p.m.

Location: Wallingford Parks and Rec STEM Room Cost: \$25

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 and different from the Winter 2021 program.

Ages 7 and 8 STEM (NEW Topics)
Course Number 2005.406
Thursdays: 10/13, 10/20, 10/27, 11/3
Time 6:15 p.m. to 7:30 p.m.
Location: Wallingford Parks and Rec STEM Room

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations. Our session will include high interest materials that will include science, technology, art and math! Maximum Number will be 10 participants

Cost: \$38

Ages 7 and 8 STEM (NEW Topics)
Course Number 2005.106
Tuesdays: 1/10, 1/17, 1/24, 1/31
Time 6:15 p.m. to 7:30 p.m.

Location: Wallingford Parks and Rec STEM Room Cost: \$38

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations. Our session will include high interest materials that will include science, technology, art and math! Maximum Number will be 10 participants

Robotics Club (New Topics) Course Number 2005.425 Ages 7 - 9

Tuesdays: 11/15, 11/22, 11/29, 12/6

Time: 6:15 to 7:30

Location: Wallingford Parks and Rec STEM Room Cost: \$38

This program is designed for participants who would like a rich introduction to robotics and are not able to make a full Saturday commitment required for our VEX IQ Robotics Team. This program encourages critical thinking, problem solving, and communication. Participants will be using Lego Mindstorms EV3 and UB Tech Robotics to learn the basics of building a robot, coding and related STEM

applications. Instructors will adjust program instruction to meet the needs of all participants.



CT STEM ACADEMY Fall 2022 and Winter 2023 Programs

Meeting Location will be at the Wallingford Parks and Recreation Department, 6 Fairfield Blvd. All Registration can be completed online at www.wallingfordrec.com.

VEX Code VR & Block Coding Course Number 2006.444 Ages 8 - 14 Wednesdays: 11/30, 12/7, 12/14 Time: 6:00 to 7:00 p.m.

> **Location: Online Cost: \$28**

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. Through robots, students will be able to make their Computer Science knowledge come to life.

> **Experimental Design Session** Course Number 2005.409 **Ages 8 to 14**

Winter Break - Wednesday, December 28, 2022 9:30 a.m. to 12:30 p.m.

Location: Wallingford Parks and Rec STEM Room Cost: \$40

Are you interested in being in the next generation of creators and inventors? In our experimental design program, students will investigate with engaging hands-on challenges such as creating structures, simple machines and protective equipment.

> **STEM Explorations** Course Number: 2005.411

> > **Ages 8 to 14**

Winter Break - Thursday, December 29, 2022

Time: 9:30 a.m. to 12:30 p.m.

Location: Wallingford Parks and Rec STEM Room **Cost: \$40**

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations. Participants will be grouped based upon experience and/or age.

Additional Fall, Winter and Spring program information, can be found on wallingfordrec.com, www.ctstemacademy.org and on Facebook and Twitter @ctstem All registration is online at wallingfordrec.com. Additionally,

families are welcome to email us at info@ctstemacademy.org or leave a message for us at 203.294.2175 (Office of Youth and Social Services)

Exploring the Natural World Course Number 2005.405 Ages 9-14

Thursdays: 9/15, 9/22, 9/29 4:15 p.m. to 5:15 p.m.

Location: Bertini Park, West Dayton Hill Road Cost: FREE - Registration Required

It's September! The sun is shining and the leaves are aabout to fall! In this program, participants will get outside and learn about various plants and animals that inhabit the world around them. Participants will also collect, observe and identify plants, rocks and minerals. Come on out and see what nature has to offer! New topics will be introduced

> **Python Coding Course Number 2006.131** Ages 10 - 15 Thursdays: 1/12, 1/19, 1/26 Time: 6:00 - 7:00 p.m.

Location: Online **Cost: \$28**

Python coding will provide participants with an experience of creating a project, test the project, making revisions and retesting the project. Come join us for this engaging form of coding.



Robotics Club Course Number 2005.125 Ages 8, 9, 10

Thursdays: 2/2, 2/9, 2/16, 2/23, Time: 6:15 to 7:30

Location: Wallingford Parks and Rec STEM Room Cost: \$38

This program is designed for participants who would like a rich introduction to robotics and are not able to make a full Saturday commitment required for our VEX

IQ Robotics Team. This program encourages critical

thinking, problem solving, and communication. Participants will be using Lego Mindstorms EV3 and UB Tech Robotics to learn the basics of building a robot, coding and related STEM applications. Instructors will adjust program instruction to meet the needs of all participants. **Topics** from fall program will not be repeated.



CT STEM ACADEMY Fall 2022 and Winter 2023 Programs



Meeting Location will be at the Wallingford Parks and Recreation Department, 6 Fairfield Blvd. All Registration can be completed online at www.wallingfordrec.com.

Attention Homeschool Families

STEAM Fun for Homeschool Families Course Number 2005.415 Ages 8 - 14

> Thursdays: 9/15, 9/22, 9/29 Time: 2:00 to 3:15 p.m.

Location: Wallingford Parks and Recreation Department, STEM Room

Cost: \$25

This is a fun program for all who are interested in Art connections to STEM. Each week we will explore a wide range of topics such as making sidewalk chalk, shaving cream marbling, magnetic cars and mud painting. This is a perfect program for homeschool students. More programming to be scheduled based upon homeschool family schedules and interest.

Fun with Chemistry Course Number 2005.110 Ages 9 to 14 Monday, February 20, 2023 Presidents' Day Time: 1:00 p.m. to 3:00 p.m.

Location: Wallingford Park and Rec STEM Room

Calling all Junior Chemists! Participants who join will experience how different substances react with one another. Some experiments may include: making different foods like ice cream; high flying reactions like film canister rockets; or colorful creations like slime and lava lamps.

Cost: \$30

Fall Family STEM Night

Course Number 2005.434 Tuesday, October 11, 2022 at 6:15 - 7:30 p.m.

All Children Must Be Chaperone By A Parent Location: CT STEM Academy, 284 Washington Street, Wallingford, CT

Cost: FREE - Registration Required

Ages 5 and 6 STEM
Course Number 2005.108
Ages 5 and 6
Monday, January 16, 2023
Martin Luther King, Jr. Day
Time 10:00 a.m. to 12:00 p.m.

Location: CT STEM Academy, 284 Washington Street

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations.

Cost: \$30

Ages 7 and 8 STEM
Course Number 2005.109
Ages 7 and 8
Monday, January 16, 2023
Martin Luther King, Jr. Day
Time 1:30 p.m. to 3:30 p.m.

Location: CT STEM Academy, 284 Washington Street

Do you like to explore science, solve problems and use technology? If you do, then STEM Academy is the perfect place for you! Join us for an engaging session of exploring many different STEM Challenges through hands-on investigations.

Cost: \$30

Winter Family STEM Night

Course Number 2005.134 Friday, January 6, 2023 at 6:15 - 7:30 p.m.

All Children Must Be Chaperone By A Parent Location: CT STEM Academy, 284 Washington Street, Wallingford, CT

Cost: FREE - Registration Required

We are now offering school day field trips for local classrooms and educators. For more information, please email us at info@ctstemacademy.org or leave a message for us at 203.294.2175 (Office of Youth and Social Services)