

SUMMER 2017 HANDS-ON STEM PROGRAMS

juniortech.org | 774.994.2097 | info@juniortech.org



REGISTRATION

Register online, using PayPal or credit card, via www.juniortech.org
Call 774-994-2097 for space availability if paying by check.

POLICIES

Classes may be cancelled due to low enrollment. Workshop enrollment is non-refundable unless a four week electronic notice is provided by email before the date of the workshop. A \$40 processing fee is applied to cancellations. Classes run rain or shine. A code of conduct and waiver must be signed at registration. We reserve the right to remove a student from a program without a refund, if the Code of Conduct is violated. Our organization does not discriminate on the basis of race, color, sex, disability, religion, national origin, or sexual orientation. Neither Jr.Tech, the instructors nor the school facilities will be held responsible for injuries sustained during a Jr.Tech program.

Thank you to our 2017 Summer Program sponsor:

nationalgrid

HERE WITH YOU. HERE FOR YOU.

Thank you to our Facility Partners: Upper Cape Cod Technical School, Cape Cod Regional Technical High School, Sturgis Charter Public School, Osterville Village Library, Three Bays Preservation, Inc.



Jr.Tech's mission is to engage students in Science, Technology, Engineering, and Math (STEM) education. We broaden students' awareness of career paths in STEM, increase skills, and encourage a lifelong interest.



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Graphic Arts Explorations!



Game Programming & Development 1&2



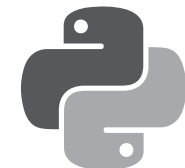
3D Modeling, 3D Printing & Robotics



Bayside Estuary Exploration!



Jr. Spy Academy!



Computer Programming and Algorithms with Python Software

New
for Grades
8-12!

Graphic Arts Explorations!

July 17, 18, 19, 20
Monday – Thursday
9:00am – 3:00pm

Price: \$198

Do you love art? Do you love sketching, design or photography?

If so learn to use the Adobe Creative Suite of software tools to create, design, and manipulate all kinds of images! Fun projects include creating digital portraits, brand designs, making art from type, poster layout, t-shirt logo design and develop cutting-edge skills using Augmented Reality software! 24 hrs. instruction.

Pack a snack, drink & lunch.

Grades: entering 6–9

Where: Cape Cod Regional Technical School, 351 Pleasant Ave, Harwich

Intro to Computer Game Programming & Development Level 1

July 24, 25, 26, 27
Monday – Thursday
9:00am – 3:00pm

Price: \$255

If you love to play computer games but wonder how they're made, then this program is for you! Using Yo Yo GameMaker software you will master the basic skills to program, create, and build your very own games and multilevel game environments. Come explore and learn to program a computer game! 24 hrs. instruction.

Pack a snack, drink & lunch.

Grades: entering 5–8

Where: Upper Cape Cod Regional Tech, 220 Sandwich Rd., Bourne

Intro to Computer Game Programming & Development Level 1 (second offering)

July 31, August 1, 2, 3
Monday – Thursday
9:00am – 3:00pm

Price: \$255

Due to high demand we're offering a second week of Level 1. Enrollment will open for this additional class once the first week is full.

If you love to play computer games but wonder how they're made, then this program is for you! Using YoYo GameMaker software you will master the basic skills to program, create, and build your very own games and multilevel game environments. Come explore and learn to program a computer game! 24 hrs. instruction.

Pack a snack, drink & lunch.

Grades: entering 5–8

Where: Upper Cape Cod Regional Tech, 220 Sandwich Rd., Bourne

3D Modeling, 3D Printing, and Robotics Workshop

August 1, 2, & 3
Tuesday – Thursday
9:00am – 4:00pm

Price: \$287

In this 3-day workshop students will learn 3D skills which include 3D Modeling, 3D Printing, programming and robotics. Students will learn the basics of 3D design using Tinkercad or similar software. Students also will learn to program the Arduino micro-controller to control the motors and read the sensor data. Students will then combine the skills of design and programming to build a robot. Students will also learn how to debug and troubleshoot problems and perform testing to test their creation. 21 hrs instruction.

Pack a snack, drink & lunch.

Grades: entering 6–9

Where: Osterville Village Library, 43 Wianno Ave, Osterville, MA

Computer Game Programming & Development Level 2

August 7, 8, 9, 10
Monday through Thursday
9:00am – 3:00pm

Price: \$205

Did you know there is a fast growing demand for computer programmers and game developers? Professionals from all fields work in this fast growing field including programmers, coders, illustrators, animators, editors, writers, and more! Continue to build your technique and skills in creating interactive computer games and multilevel environments! Students who have completed an earlier Level 1 course may enroll in this course. Don't delay — only 10 spots in this course! 24 hrs instruction.

Pack a snack, drink & lunch.

Prerequisite: Level 1

Where: Sturgis Charter Public School • West Campus, 105 West Main St, Hyannis, MA

Bayside Estuary Exploration!

August 8 – Tuesday
(rain date – Friday, 8/11)
8:30am – 11:30am

Price: \$52

This workshop is an engaging beachside program with hands-on water quality and marine ecology activities. Students participate in scientific marine explorations including seine netting, plankton tows, minnow traps, and water sample collection and analysis—all while building skills in stewardship knowledge and natural history lessons on the local marine ecosystem! Program educators join us from Three Bays Preservation, Inc. 3 hrs instruction. *Pack snack & drink.*

NOTE: This program will run with light rain, clouds, wind, etc. Rain date scheduled for Friday, 8/11 for very adverse weather. Please call 774-994-2097 the morning of program to hear announcement of date change due to weather only.

Grades: entering 4 & 5

Where: Douses Beach, Osterville, MA

Jr. Spy Academy!

August 9 – Wednesday
9:00am – 12:00pm

Price: \$59

Your mission should you choose to accept it is to report to Jr. Spy Academy training! Jr. Spies will learn to analyze ink using chromatography, write and decode messages with invisible ink, use suspect/clue drawing skills, and decide as a team on a written code for spy team communication. We will also learn how to dust for & analyze fingerprints as well as how to use cabbage juice to test the acidity of a substance. These skills will all come into play as we work as a team to solve a mystery mission. In collaboration with Full STEAM Ahead. 3 hrs instruction. *Pack snack & drink.*

Grades: entering 4 & 5

Where: Osterville Village Library, 43 Wianno Ave, Osterville, MA

Intro to Computer Programming and Algorithms using Python Software

August 14, 15, 16, & 17
Monday – Thursday
9:00am – 3:00pm

Price: \$198

Have you ever wondered how to write computer programs or how computer algorithms work? In the introduction to computer programming and algorithms course you will learn how to think: procedurally, logically, ahead, concurrently, abstractly, recursively and creatively in order to write small computer programs using the Python programming language. Starting with basic data types such as strings, integers, lists and booleans to an in depth look at sorting algorithms, we will cover all of the necessary tools needed to start writing programs in Python and more importantly develop proper programming practices and techniques. 24 hrs. instruction. *Pack a snack, drink & lunch.*

Grades: entering 8–12

Where: Sturgis Charter Public School • West Campus, 105 West Main St, Hyannis, MA