



PROGRAM SUMMARIES 2016

PROGRAM	CAMPUS	LOCATION	AGES	DAY	LENGTH	DATES	COST*
Art/Tech Program	CCCC	Hyannis	Grades 6 - 8	Full Day	5-day week	August 1 – August 5, 2016	\$275
Exploration of Robotics and Game Design	UMD	Dartmouth	Ages 12 - 15	Full day	5-day week	July 11-15 or July 18-22, 2016	\$150
Flight Science	CCCC	West Barnstable	Grades 6-8	Full Day	5-day week	July 25-29, 2016	\$275
Kids College	BCC	Fall River	Elementary through high school	Full Day	5-day week	July 11 - Aug. 19, 2016	\$185
Look What I Created!	MCC	Canton	Grades 3 - 5	9 am – 2 pm	4/ 5-day weeks	July 5 – 15, 2016	\$347
Maker Movement: Build a Bot	CCCC	West Barnstable	Grades 6 - 8	Full Day	5-day week	August 8 – August 12, 2016	\$275
Minecraft/Coding	CCCC	Hyannis	Grades 6 - 8	Full Day	5-day week	July 18 – 22, 2016	\$275
Science Investigative Team	MCC	Canton	Grades 6 - 8	9 am – 2 pm	5-day week	July 25 – August 5, 2016	\$347
Summer Science Academy	BSU	Bridgewater	Grades 6 - 8	Full day	5-day week	3 Sessions: July 11-15; July 18-22; July 25-29	\$400
Summer Science Academy	BSU	Bridgewater	Grades 9 -12	Full day	5-day week	3 Sessions: July 11 -15; July 18 -22; July 25-29	\$490

**ALL programs offer scholarships to students unable to afford regular tuition.*

Art/Tech Program

SPONSOR: Cape Cod Community College

WHERE: Cape Cod Community College, Hyannis Center, Hyannis

WHO: 6th – 8th grade students

WHEN: August 1 – August 5, 9:00 a.m. – 4:00 p.m.

COST: \$275

CONTACT: Mary Conklin, (508) 375-5010 mconklin@capecod.edu

WEBSITE: <http://www.capecod.edu/web/ccpe/summer-of-science>

WHAT: The Art/Tech program will focus on developing cutting edge technology skills in Photoshop, Illustrator and InDesign. Adobe software basics will be covered, including demonstrations and activities using software tools and tricks. Each day of the program will build on the next. Students will have the opportunity to enhance and advance their skills through interactive and fun activities such as creating zombie/vampire versions of themselves, greeting card design, advertisement design, logo design, and much more!

Exploration of Robotics and Game Design

SPONSOR: University of Massachusetts Dartmouth

WHERE: UMass Dartmouth campus

WHEN: Two separate one-week sessions, July 11-15 and July 18-22, 2016, 9:00 a.m. - 4 p.m.

WHO: Students ages 12-15

COST: \$150.00 per student per week; \$25.00 deposit should be mailed with application.

CONTACT: Sheryl Sears, s.sears@umassd.edu or 508-999-8457

WEBSITE: <http://www.umassd.edu/engineering/cis/cissummercamp/>

WHAT: Campers will work in teams to design a simple computer game, to make the robots move the way they want them to, to tell a story through computer animation, and to develop a mobile application. Campers will work in teams with our teachers and students and on the last day will show parents how smart and talented they are and what they have accomplished. Campers will make new friends, have fun, and experience the value of teamwork. This camp may inspire you to choose computers as your career in the bright future ahead of you!

Flight Science Program

SPONSOR: Cape Cod Community College

WHERE: Cape Cod Community College, West Barnstable

WHO: 6th – 8th grade students

WHEN: July 25 – July 29, 9:00 a.m. – 4:00 p.m.

COST: \$275

CONTACT: Mary Conklin, (508) 375-5010 mconklin@capecod.edu

WEBSITE: <http://www.capecod.edu/web/ccpe/summer-of-science>

WHAT: Flight science week is a STEM-based, week-long program for children entering grades 6, 7 and 8. Students will work in engineering teams to build and fly 3 meter-tall (10 feet), hot air balloons. Teams will also design, build and fly payloads using their balloons. Students will also have the opportunity to experiment with model airplanes to learn why they fly and to optimize the flight of these airplanes. Students will take a break from their experiments to get checked out in a Cessna 172 as they learn to fly using flight simulators. Finally, students will put their knowledge of flight to the test when they build and optimize the flight of model gliders!

Kids College

SPONSOR: Bristol Community College

WHERE: Bristol Community College Campus in Fall River

WHO: Elementary, middle, and high school students

WHEN: Week long programs featuring three educational tracks, July 11- August 19, 2016

COST: \$185

CONTACT: 508.678.2811, ext. 2527 / Toll Free 800.462.0035 (MA & RI only)

WEBSITE: www.bristolcc.edu/workforce/communityeducation/kidscollege

WHAT: “Kids College” provides activities that develop skills and content in the areas of science and technology in a fun, engaging environment. Themed tracks include “Cookin’ up a Storm,” Lego Engineering, and Minecraft. In addition, programs will focus learning around six countries to add to the educational experience.

Look What I Created!

SPONSOR: Massasoit Community College

WHERE: Massasoit Community College, Canton Campus

WHO: Middle School students (grades 3 - 5)

WHEN: July 5 - 15, 9:00 a.m. - 2 p.m.

COST: \$347

CONTACT: Shannon Skelly, (508) 588-9100 x1656 skelly@massasoit.mass.edu

WEBSITE: <http://www.massasoit.edu/corporate-and-community-education/community-education/youth-education-programs/index>

WHAT: This two-week session will introduce students to basic concepts in science, math and engineering. Our goal is to spark scientific imagination through creative and challenging projects. We encourage teamwork and social responsibility. Is there an idea for constructing a bridge lurking in the back of your brain that we can test? Would you like to learn how to design and build a simple machine? Would you like to try your hand at studying habitats where local animals live? This is your chance to test your ideas or simply find out how things work. We’ll explore our world through science and use math to explain what happened. Team projects can include many topics. Sign on to join this investigative team and let’s head outdoors together to have some fun, to look at the world around us, and to figure out how does “that” work. Warning: you may never look at science and math the same way again after having this much fun! Students will need to bring a snack and lunch.

Maker Movement

SPONSOR: Cape Cod Community College

WHERE: Cape Cod Community College, West Barnstable

WHO: 6th – 8th grade students

WHEN: August 8 – August 12, 9:00 a.m. – 4:00 p.m.

COST: \$275

CONTACT: Mary Conklin, (508) 375-5010 mconklin@capecod.edu

WEBSITE: <http://www.capecod.edu/web/ccpe/summer-of-science>

WHAT: Students will join the Maker Movement and take home their “very own Arduino robot” using DC motors, servos and a sensor that can follow commands, avoid obstacles, and more! From building simple circuits to working with Arduino, a powerful and easy to use open-source prototyping platform, students will learn through active engagement as they explore concepts in electricity & magnetism, computer science and robotics. Topics and activities will include: coding, circuits, battery basics, DC motors, servos and sensors; DIY design from prototyping to product.

Minecraft/Coding

SPONSOR: Cape Cod Community College

WHERE: Cape Cod Community College, Hyannis Center, Hyannis

WHO: 6th – 8th grade students

WHEN: July 18 – July 22, 9:00 a.m. – 4:00 p.m.

COST: \$275

CONTACT: Mary Conklin, (508) 375-5010 mconklin@capecod.edu

WEBSITE: <http://www.capecod.edu/web/ccpe/summer-of-science>

WHAT: Minecraft week is a STEM-based, week-long program for children entering grades 6, 7 and 8 with coding activities mixed in. Students will approach game play from a new angle to learn how to think critically about their work with the infinite possibilities of the game. Students will create themes, storylines, dialog between characters, objectives, goals and more!

Science Investigative Team

SPONSOR: Massasoit Community College

WHERE: Massasoit Community College, Canton Campus

WHO: Middle School students (grades 6 - 8)

WHEN: July 25 – August 5, 9:00 a.m. - 2 p.m.

COST: \$347

CONTACT: Shannon Skelly, (508) 588-9100 x1656 sskelly@massasoit.mass.edu

WEBSITE: <http://www.massasoit.edu/corporate-and-community-education/community-education/youth-education-programs/index>

WHAT: Students will investigate the world around them through the eye of an engineer using science and math. Test materials to determine their characteristics then use what you learn to create your own unique design. Then we'll put your design to the test to see how it works. We'll explore a variety of topics that are fun and interesting, such as ecology, health and the body, physics and the environment. Let's work together with team games and eye opening hands on activities. Students will need to bring a snack and lunch.

Summer Science Academy

SPONSOR: The Center for the Advancement of STEM Education at Bridgewater State University

WHERE: Bridgewater State University's main campus

WHEN: Three separate one-week sessions, July 11-15; July 18-22 and July 25-29. Grades 6-8 program hours are 8:30 AM -4:00 PM. Grades 9-12 program hours are 9 AM -4:30 PM

WHO: Students entering grades 6-12 in the fall of 2016.

COST: \$400 - \$490 per student per week (does not include lunch or transportation)

CONTACT: Maura Whittemore mwhittemore@bridgew.edu or (508) 531-2575

WEBSITE: <http://microsites.bridgew.edu/case/summer-science-programs>

WHAT: The Center for the Advancement of STEM Education at Bridgewater State University is excited to offer hands-on science classes for students entering grades 6-12 in the fall of 2016. This unique program allows students to work as scientists and is designed to inspire students about science while providing them with the foundations necessary for further scientific exploration. Summer Science Academy students are immersed in science courses and conduct hands-on investigations in their selected class.

- ***x-STREAM Adventures*** (Entering grades 6-8) – Bridgewater Campus (July 11 -15)
Water. It is a basic biological need and one that we take for granted. Yet, that perfectly clean-looking stream may not be so clean. If you love the outdoors and care about the environment, then come and join us for x-STREAM Adventures. Here you can venture into the world of water and see how land use impacts the physical, biological and chemical composition of a local New England river.
- ***Forensics Institute of Bridgewater*** (Entering grades 6-8) – Bridgewater Campus (July 18-22)
As a new employee at the Forensics Institute of Bridgewater (FIB), you expect your week-long training on crime scene investigations to be exciting, but you never thought it would be THIS exciting. While training on the various crime lab biotechnology techniques, a live case is delivered and F.I.B. needs YOU to help determine what happened!
- ***Whale of a Mystery*** (Entering grades 6-8) – Bridgewater Campus (July 25-29)
Imagine that you have just been hired as a junior scientist for the Bridgewater Animal Forensics Institute (BAFL). Only a day into your training, an important case arrives. It is up to YOU to help determine if the tissue samples sent from a field agent are those of illegally hunted, endangered whale species!
- ***Biotech Career Rotations I: Real-world Techniques to Answer Real-world Problems*** (Entering Grades 9–12) – Bridgewater Campus (July 11 -15)
During this week-long program, students will have the opportunity to explore biotechnology procedures used in industry and research and their real world applications. Activities will include making bacteria glow in the dark with green fluorescent protein (GFP), determining if “Doritos” are genetically modified (GMO) by using PCR (polymerase chain reaction) to assay for a GMO marker and performing gel electrophoresis of DNA STRs (short tandem repeats), a process commonly used in forensics for identification of individuals. This program is perfect for anyone interested in biology and biotechnology and will be sure to set you apart when it is time to apply for college.
- ***So you want to be a what? Exploring careers in medical sciences*** (Entering grades 9-12) – Bridgewater Campus (July 18-22)
Everyone has heard of a medical doctor, but what about a laboratory animal technician? Pathologist? Physical therapist? Histotechnician? Are you interested in careers in the medical field but not even sure what some of these job titles mean or the type and length of school required for each? In this weeklong course, students will have the opportunity to explore various career options in the medical field. Activities will include solving medical mysteries, a blood laboratory, and heart dissection. Additionally, students will hear from a variety of practitioners in different fields of biomedical science. This program is perfect for anyone interested in medical practice or research and will be sure to set you apart when it is time to apply for college.
- ***Biotech Career Rotations II: Real-world Techniques to Answer Real-world Problems*** (Entering Grades 9–12) – Bridgewater Campus (July 25-29)
In this intensive, week-long course, students will explore how biotechnology impacts our lives across a wide range of disciplines. Students will learn about and conduct experiments routinely used in food and water safety labs to identify bacterial contamination, design and implement assays to identify genetically modified foods and conduct experiments used in hospital laboratories to test for disease and quantify the viral load of a patient. During these exercises students will gain not only theory, but have the opportunity to carry out such advanced molecular techniques as Polymerase Chain Reaction (PCR), Gel Electrophoresis, Cloning and Enzyme Linked Immunosorbent Assays (ELISA). This program is perfect for anyone interested in biology and biotechnology and will set you apart from your peers when it is time to apply for college.

*Please note that you do not need to take Biotech Career Rotations I before you can take Biotech Career Rotations II. However, if you were enrolled in Biotech Career Rotations I during the summer of 2015, please enroll in Biotech Career Rotations II.