EcoTarium Summer Discovery Camp

At the EcoTarium’s Summer Discovery Camp, kids spend their days investigating, making new discoveries and having fun adventures. Each camp is a unique balance of age-appropriate science content, day camp fun, and time to explore individual interests. Each camp week explores a different theme and is divided into five age groups: Tadpoles (5-6), Eagle Eyes (7-8), Explorers (9-10), Investigators (11-12), and Counselors-in-Training (13-14). Many campers return year after year, advancing from one age group to the next and building on skills learned the year before.

Time: 9:00 a.m. - 4:00 p.m. (extended hours available)
Registration Opens: February 2, 2105
Cost with Registration: Before April 1, 2015: Ages 7-14: $305 per week, $270 for members; Tadpoles (Ages 5&6) Half Day: $175 per week, $155 for members; Tadpoles (Ages 5&6) Full Day: $350 per week, $310 for members
Cost as of April 1, 2015: Ages 7-14: $325 per week, $290 for members; Tadpoles (Ages 5&6) Half Day: $185 per week, $165 for members; Tadpoles (Ages 5&6) Full Day: $370 per week, $330 for members
Extended Hours: 7:30-9:00 a.m.: $70/week; 4:00-5:30 p.m.: $70/week
Contact: (508) 929-2703
Web: [www.ecotarium.org/summercamp](http://www.ecotarium.org/summercamp)

- **Animals, Animals!**
  Dates: July 6-10, 2015
  Do you love watching and learning about animals? Have you gone exploring in a pond or meadow to discover who lives there? Are you curious about what hedgehogs and turtles eat for dinner? Have you ever wondered what it’s like to be a zookeeper? During this week-long session, you’ll learn about the habitats and diets of animals in the wild and then gain hands-on experience by helping to prepare food and maintain the enclosures of live animals at the EcoTarium.

- **Make It!**
  Dates: July 13-17, 2015
  Are you the "creative type?" From circuitry to rocketry, catapults to simple robotics, this camp explores how fun it can be to design, create, and take things apart. Make it fly, make it float, make it light up! Experience hands-on engineering at its best and then get up close and personal with the laws of physics as you travel down the zipline on our Tree Canopy Walkway. Leave camp feeling empowered to make your own fun!

- **Outdoor Adventures**
  Dates: July 20-24, 2015
  Increase your comfort in the outdoors and build practical skills in this week packed with adventure! Create an outdoor home base while learning camp-making skills. With base camp established, craft primitive tools, learn how to make twine, and experiment with rope work and knots. Take a hike, catch a frog, and spend as much time outside as possible! Experience a treetop safari on the Tree Canopy Walkway and explore how scientists live and do research at the top of the forest.
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- The EcoTarium Experience
  Dates: July 27–31, 2015
  Do you like all types of science? Do you love the hands-on, interactive science experiences we create at the EcoTarium? Sign up for The EcoTarium Experience! From the Tree Canopy Walkway and our beautiful grounds to the planetarium and our exhibits, we’ve selected our favorite lessons and activities from the educational programming we deliver throughout the year and combined them into one great camp!

- Spies and Mysteries
  Dates: August 3–7, 2015
  Campers match imagination with real technology and science skills while exploring the history of detectives and spies. Join us as we build tools for our own spy kits ranging from disguises to mini flashlights. We’ll practice messaging other operatives with secret codes and disappearing ink, as well as solve mysteries using fingerprinting. Campers will complete missions throughout the week from locating hidden messages using a map and compass to code-breaking using a cipher wheel. Will you accept the mission?

- Animal Treats and Training
  Dates: August 10–14, 2015
  A popsicle for an otter? Training time for a lizard? A paper mache piñata for a fox? For most animals, living in captivity is much different than living in the wild. Come find out what zookeepers do to make sure the critters in their care are happy and healthy. You’ll go behind the scenes to watch animal training by our wildlife staff and then build puzzles and treats to engage our resident animals.

Mass Academy - Intellect Quest
A Summer Program for kids who need an Intellectual Challenge!
Intellect Quest is a fun and challenging program designed to stimulate the inquisitive minds of bright, motivated students. Designed for students (grades 5-8) throughout the area, this experience requires cooperation, organization, and innovation.
Under the supervision of our summer director and alongside Mass Academy students, participants work in a hands-on environment within the disciplines of math, science, and technology.
Dates: July 20 - 24, 2015 - Grade level 5-6, must be entering grades 5 - 6 as of September 2015
Dates: July 13 - 17, 2015 - Grade level 7-8, must be entering grades 7 - 8 as of September 2015
Cost: $350.00 (lunch not included), a non-refundable deposit of $100.00 is required with a completed application. Sessions are limited, based on first come, first served.

Program is held at the Mass Academy of Math and Science, 85 Prescott Street, Worcester, MA. Each session runs Monday - Friday from 9:00 am to 3:00 pm, with a morning drop off at 8:30 if needed.
View details at http://www.wpi.edu/academics/k12/intellect-quest.html
Register directly through Mass Academy at www.massacademy.org

Prepared by the
CENTRAL MA STEM NETWORK
Mass Audubon - Teen Adventure Program
Explore the wilds of Worcester County and beyond! This off-site adventure week features biking, canoeing on the Blackstone River and hiking Mt. Wachusett. We'll finish the week by exploring and camping at Wildwood, Mass Audubon's residential camp.
Qualifying Students: Ages 12 - 17
Dates: July 6 - 10, 2015
Time: 9 am - 5 pm
Cost: $410.00 Members / $510.00 Nonmembers
Contact: bmbrookcamp@massaudubon.org
Camp Brochure and Registration: http://www.massaudubon.org/get-outdoors/wildlife-sanctuaries/broad-meadow-brook/camp

Mass Audubon - Painting With Your Digital Camera
Explore nature through the lens of a camera. Learn the basics of photography while learning about nature. We will hike and explore the sanctuary all the while seeking out interesting subjects for our photo show. Participants will need to bring their own digital camera for this week. Price includes materials fee.
Qualifying Students: Ages 9 - 16
Dates: July 20 - 24, 2015
Time: 9 am - 3:30 pm
Cost: $240.00 Members / $335.00 Nonmembers
Contact: bmbrookcamp@massaudubon.org
Camp Brochure and Registration: http://www.massaudubon.org/get-outdoors/wildlife-sanctuaries/broad-meadow-brook/camp

Mass Audubon - Exploring Mass Audubon
Each day we will travel to a different Mass Audubon Sanctuary and spend time learning about the unique features that it has to offer. Team building, birding, animal identification, hiking and more will be included. This is a field trip-based session traveling in our Mass Audubon van.
Qualifying Students: Ages 10 - 14
Dates: August 3 - 7, 2015
Time: 9 am - 4 pm
Cost: $410.00 Members / $510.00 Nonmembers
Contact: bmbrookcamp@massaudubon.org
Camp Brochure and Registration: http://www.massaudubon.org/get-outdoors/wildlife-sanctuaries/broad-meadow-brook/camp

Girls Inc Summer STEM and Leadership Camp
Summer STEM and Leadership Camp welcomes girls to join us as we explore science, technology, engineering and math through a variety of interesting and creative activities geared to inspire all girls to be strong, smart, and bold. Girls Inc. has been serving girls for over 99 years. We offer quality researched-based programs in a safe environment and provide opportunities for girls to take healthy risks, build leadership skills and master physical, intellectual, social and emotional challenges. Our Summer STEM & Leadership Camp takes advantage of both our Camp Kinneywood and Winthrop House locations; where the city meets nature.
Dates: 8 weeks from June 28-August 8, 2015
Cost: $100 per week
Time: 9:00 am - 4:00 pm, Extended hours: $25 per week / 8:00 am - 5:30 pm
Audience: Girls entering grades 7 and up
How to register: Contact Girls Inc. of Worcester at 508.755.6455 or www.girlsincworcester.org
Contact Info: Kathy Ogden, 508.755.6455 x37 or kodgren@girlsincworcester.org

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Worcester Area Middle School Students
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WPI Pre-College Programs for High School Students

FRONTIERS
Frontiers challenges soon-to-be high school juniors and seniors to explore the outer limits of knowledge in science, technology, engineering, and mathematics (STEM). You will learn from outstanding professors and graduate students while using state-of-the-art experimental, analytical, and computer technology facilities. Attend one or both sessions to immerse yourself in laboratory techniques and unsolved problems across a variety of engineering and science disciplines. Evening activities and interaction with WPI students and faculty ensure your stay at WPI is more than just an academic experience.

During Session I and II, you will focus on one STEM discipline, and as a complement, enroll in a humanities and arts workshop. Please visit our website for details on the areas of study at www.wpi.edu/+frontiers.

Dates: Frontiers I July 5-17 & Frontiers II July 19-31
Cost: $2,595 for Frontiers I or II; and $4,495 for both sessions
Time: Overnight Program
Audience: Entering grades 11-12
Apply online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Frontiers Program at 508-831-5286 or frontiers@wpi.edu with questions
Application Deadline: April 30**

LAUNCH
This learning and research opportunity is for students entering freshman and sophomore years of high school. You’ll spend your days focusing on current problems and challenges by choosing one of the following fields:

• Biology
• Chemistry/Biochemistry
• Computer Science
• Engineering Technology*
• Environmental Modeling
• Interactive Media and Game Design
• Intro to Computer Aided Design (CAD)
• Robotics (VEX)

Along with faculty, current WPI students, and classmates, you will use state-of-the-art experimental, analytical, and computer technology to complete projects and assemble your findings. Attend as a day student or choose our residential option and stay overnight.

Dates: August 3-7 (day) and August 2-7 (overnight)
Cost: $595 (day), $975 (overnight)
*Additional fee applies for Engineering Technology
Time: 9 am – 4 pm (day) or Overnight Program
Audience: Entering grades 9-10
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

Prepared by the
CENTRAL MA STEM NETWORK
LEADERSHIP ACADEMY FOR YOUNG WOMEN
Follow in the footsteps of inspirational women who’ve come before you. Develop leadership, presentation, and project management skills through fun activities such as mock political campaigns and performance art. Learn from strong female leaders and engage in hands-on learning as you build confidence and creativity. A variety of evening activities will ensure your experience showcases all that the WPI campus has to offer.

Dates: July 19-24
Cost: $975
Time: Overnight Program
Audience: Girls entering grades 8-10
Apply online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions
Application Deadline: Rolling Admission (students notified of decision within 2 weeks of application)

WPI Junior Pre-College Programs for Elementary & Middle School Students

CRIME SCENE SCIENCE
Whodunit and why did they do it? The pressure is on as you join a Crime Scene Investigation (CSI) team. With our guidance, you will be responsible for securing a crime scene, interrogating witnesses, and processing evidence in our biology and chemistry labs. Choose Session 1 or Session 2.

Dates: Session 1 July 20-24 or Session 2 July 27-31
Cost: $595
Time: 9 am - 4 pm
Audience: Entering grades 6-8
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

ENGINEERING TECHNOLOGY
Explore WPI’s state-of-the-art laboratories and machine shop as you learn about advanced automation techniques. You’ll work hands-on with pieces of equipment—emphasizing safe manufacturing practices—to design and build components that will come together as a functional assembly by the end of the week. Choose Session 1 or Session 2.

Dates: Session 1 July 6-10 or Session 2 July 20-24
Cost: $595
Time: 9 am - 4 pm
Audience: Entering grades 7-8
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

CAMP REACH (Awarded the Presidential Award for Excellence in STEM Mentoring)
Entering 7th grade? Join a group of inquisitive girls on the path to discovery and hands-on engineering who want to change the way the world works. Work in teams with a community “customer” to create a plan for solving a real problem—emphasizing the social context of engineering design. Camp Reach stays connected to participants through follow-up programs throughout their school year.

Dates: July 19-31
Cost: $1,295
Time: Overnight Program
Audience: Girls entering grade 7
Apply online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Camp Reach Program at 508-831-5286 or reach@wpi.edu with questions
Application Deadline: April 15
INNOVATIONS IN BIOENGINEERING
Engineering is often the key to finding creative solutions to society’s problems. Experience the excitement of working with an undergraduate research student on a bioengineering project that will improve people’s health and well-being. You will also participate in workshops led by a faculty member from WPI’s Robert A. Foisie School of Business, designed to engage your creativity and practice leadership skills.

Dates: July 27-31
Cost: $395 / Full scholarships available for 10 underrepresented girls from Worcester area public schools (sponsored by the National Science Foundation).
Time: Overnight Program
Audience: Girls entering grades 8-9
Apply online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions
Application Deadline: April 15

MUSIC TECHNOLOGY
Combine your love of music and computers in this program focused on interactive music systems. Under the guidance of a music professor and classical guitarist, you will learn how to use computers to enhance digital recordings. You will write original compositions of your own, and learn about the analysis and performance of music in a small group environment. No previous experience required. Choose Session 1 or Session 2. Sessions are limited to 10 students.

Dates: Session 1 July 20-24 or Session 2 July 27-31
Cost: $675
Time: 9 am – 4 pm
Audience: Entering grades 6-8
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

JUNIOR ROBOTICS CHALLENGE – ELEMENTARY
Master the fundamentals of designing, building, and programming autonomous robots. Using the LEGO MINDSTORM platform, you’ll work as part of a team to construct your own robot that will face off against others in a friendly competition on the final day. Choose Session 1 or 2.

Dates: Session 1 July 6-10 or Session 2 July 13-17
Cost: $495
Time: 9 am – 4 pm
Audience: Entering grades 4-5 (no experience required)
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

JUNIOR ROBOTICS CHALLENGE – MIDDLE
Master the fundamentals of designing, building, and programming autonomous robots. Using the LEGO MINDSTORM platform, you’ll work as part of a team to construct your own robot that will face off against others in a friendly competition on the final day.

Dates: July 13-17
Cost: $495
Time: 9 am – 4 pm
Audience: Entering grades 6-8 (no experience required)
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

Prepared by the CENTRAL MA STEM NETWORK
ADVANCED ROBOTICS
Are you experienced with LEGO MINDSTORM and ready for the next level? Explore more complex programming and construction techniques with our brilliant robotics faculty by your side.

Dates: July 6-10  
Cost: $595  
Time: 9 am – 4 pm  
Audience: Entering grades 6-8 (admission requires demonstration of previous experience)  
Apply online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions
Application Deadline: Rolling Admission (students notified of decision within 2 weeks of application)

PHYSICSPALOOZA
Develop a new appreciation for the universe as you explore the wonders of physics through dynamic demos and hands-on activities. You will experience tug-of-war and water rocket competitions, participate in debunking science fiction films, and experiment with lights, lasers, and sound. These fun activities will take place indoors and outdoors.

Dates: August 3-7  
Cost: $595  
Time: 9 am – 4 pm  
Audience: Entering grades 6-8  
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

VIDEO GAME DESIGN
Explore virtual reality by designing your own video games! In this exciting program, you will learn the foundations of video game level design, programming concepts, and interactive media, while building your own video games. You will participate in game development projects in 2D and 3D environments, allowing your ideas and creativity to run wild. Choose Session 1 or Session 2.

Dates: Session 1 July 20-24 or Session 2 July 27-31  
Cost: $675  
Time: 9 am – 4 pm  
Audience: Entering grades 6-8  
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions

WOMEN IN SCIENCE
Are you interested in learning more about a career path in engineering, medicine, math, or science? Join this survey program to experience hands-on workshops in various STEM disciplines, presented by female role models including WPI faculty, graduate students, and guests who are industry professionals. Let us show you the way to becoming a woman in science and engineering!

Dates: July 13-17  
Cost: $395  
Time: 9 am – 4 pm  
Audience: Girls entering grades 5-7  
Register online at www.wpi.edu/+summer starting February 2, 2015
Contact WPI Summer Programs at 508-831-4900 or summer@wpi.edu with questions
Tufts University Adventures in Veterinary Medicine
Discover if the exciting career of veterinary medicine is right for you! Adventures in Veterinary Medicine (AVM) is a fun and engaging career exploration program that will give you a deeper understanding of the veterinary profession and the demands of veterinary school. Sessions include lectures by Tufts faculty and vet students, fascinating laboratories and demonstrations, and hands-on activities with animals.

**Dates:** Programs run from June–August; visit our website for specific dates
**Cost:** $750 for middle school sessions; $3,350 for high school residential sessions; $2,100 for high school day sessions
**Time:** Visit our website for times
**Audience:** Current 7th graders (rising 8th graders) and up
**How to register:** Visit our website for application information
**Contact Info:** Phone: 508-839-7962; Email: avm@tufts.edu; Web: vet.tufts.edu/avm

AeroVenture Institute
Let your dreams take flight and earn college credit this summer with our exciting Professional Aviator Cadet™ Program. The Professional Aviator program is a college credit pilot certification course specially designed to provide High School students in the 10th - 12th grades with the highest caliber flight training available in the industry, while gaining a thorough grounding in Science, Technology, Engineering and Mathematics (STEM) as applied to the aviation and aerospace industry in an exciting, real-world, scenario-based training environment. The 2014 Boeing Pilot & Technician Outlook—a respected industry forecast of aviation personnel required to meet the industry's demand over the next 20 years—projects a global need for 533,000 new commercial airline pilots and 584,000 new maintenance technicians by 2033. That equates to a need for nearly 27,000 new commercial airline pilots and 29,000 new maintenance technicians globally each year! The AeroVenture Institute is located at Southbridge Municipal Airport, and has been named by the Aircraft Owners and Pilots Association as one of the Top 10 Flight Schools in the United States in both 2013 and 2014.

**Audience:** High School Students, Grades 10 - 12
**Registration Deadline:** May 15, course runs Saturdays, June 20 - August 15th, 9am - 12pm
**Location:** Southbridge Municipal Airport
**Cost:** Please see website for course options and details!

*Online Registration Required. [http://www.aeroventureinstitute.org/cadetaviator/](http://www.aeroventureinstitute.org/cadetaviator/)

Mount Wachusett Community College STEM Starter Academy
The STEM Starter Academy is a Commonwealth of Massachusetts grant-funded program designed to support students enrolling in STEM disciplines at MWCC in the Fall of 2015. Participants receive 2 free courses (as well as books), field trips to explore career options, community service opportunities and up to a $1,750 stipend upon successful completion of the program.

**Dates:** Tuesday, July 7, 2015 - Friday, August, 20, 2015
**Cost:** FREE
**Time:** Monday - Friday, 9:00AM - 3:00PM
**Audience:** High School Graduates and older / students must also enroll at MWCC for Fall 2015 in STEM majors.
**How to register:** Interested students must complete an application and be accepted into the program.
**Contact Info:** Christine Davis
STEM Starter Academy Recruiter
cdavis32@mwcc.mass.edu
978.630.9209

Prepared by the
![Central MA STEM Network](image)
The QCC STEM Summer Bridge is a college-readiness program that will provide graduating high school seniors with an overview of college and career pathways in science, technology, and engineering. Students will sample STEM programming, visit area employers, and receive mathematics instruction. This summer bridge program provides an excellent springboard for students interested in pursuing STEM in college, but who may not be sure where to start.

**Dates:** June 2015  
**Cost:** No cost  
**Time:** TBD  
**Audience:** Incoming first year students, with emphasis on graduating high school seniors  
**How to register:** TBD  
**Contact Info:** [http://www.qcc.edu/academics/stem-starter-academy](http://www.qcc.edu/academics/stem-starter-academy)