

2015-2016 STEM COMPETITIONS AND CHALLENGES IN MAINE


Maine is rich with opportunities for youth to engage in STEM (science, technology, engineering and math) outside of school. Of particular interest are competitions and challenges that encourage youth to tackle important issues facing the world today. These programs help youth develop their skills in data literacy, problem solving, teamwork, leadership and communication. This guide provides information on more than a dozen ways to pique their interest in the STEM disciplines.

This document was produced by The Reach Center at the Maine Mathematics and Science Alliance (MMSA). The mission of The Reach Center is to increase students' opportunities to learn new concepts in STEM every day – both in and out of school. Visit www.mmsa.org to learn more about Reach and MMSA. You can find more exciting ways to partake in STEM on the STEM Resource Bank: www.steminme.org. Contact Stefany Burrell, sburrell@mmsa.org, for more info.



This information is subject to change. If a listing interests you, please research it for more details. MMSA does not guarantee that this is a comprehensive list. Inclusion in this directory is not an endorsement of a program or its parent organization.

KEY

E Elementary	S School-Affiliated For questions about home schools, contact state coordinator.	 Teams Teams vary in size depending on program.	C Computer Science Has a strong computer science component.
M Middle	O Other Affiliation These competitions do not require school affiliation.	 Individuals	R Research Has a strong original research component.
H Secondary			
P Post-Secondary			

ENGINEERING

Destination Imagination **E M H S O**

April 9, University of Maine

Teams of youth are tested to think on their feet, work together and devise original solutions to challenges. They learn to unleash their imaginations and take unique approaches to problem solving.

Registration deadline: February 1

Website: www.createme.org

Junior Solar Sprint **M S O**

1st Saturday in June, Owls Head Transportation Museum

Youth design and build model solar cars to run with 3-Volt solar panels. Winners for several categories: speed, technical merit, craftsmanship, recycling, creativity and kids' choice.

Registration deadline: March 1

Website: www.meeppnews.org/ontheracetrack



KidWind Challenge

April 1, USM Portland; possibly 1st Friday in May, University of Maine

Youth design model wind turbines from common materials. Teams are judged on creativity, performance of their wind turbines and knowledge of the subject matter.

Registration deadline: Until slots are filled

Website: www.eventbrite.com/e/kidwind-challenge-event-portland-me-registration-18608644958

Maine Wind Blade Challenge

1st Friday in May, University of Maine

Youth design model wind turbines and use vacuum infusion to build composite blades. Turbines are tested for power output and the teams present on their experience to judges.

Registration deadline: November 20

Website: www.mainewindbladechallenge.com

Odyssey of the Mind

Regionals: March 12; State: April 2, Biddeford; Primary (K-2): March 19, Auburn

Each team of 5-7 works on a long-term project in one of five categories (including structures, vehicle/mechanical & technical). At the tournament, they also solve "spontaneous" problems.

Registration deadline: January 15

Website: www.meodyssey.org

MATHEMATICS

Maine State Math Meet

April 5, Augusta Civic Center

Statewide competition with primarily precalculus topics in individual and team rounds. 5 meets a year at 10 different sites. Top ten competitors from each school compete in this culminating event.

Registration deadline: February 14

Website: www.mainestatemathmeet.net

MATHCOUNTS

Regionals: January 30; State: March 5

Students compete individually and in teams. The top 10 individuals then compete head-to-head in front of a live audience.

Registration deadline: December 31

Website: www.mathcounts.org/programs/competition-series

Southern Maine Math League

December 18 & March 15 in Saco; February 2 in Kennebunk; May 3 in Portland

Youth in grades 7 & 8 work on math problems individually and their scores contribute to their team's total score.

Registration deadline: November 1

Website: sites.google.com/a/westbrook.k12.me.us/smml

Southern Maine Elementary Math League

December 10, January 26, March 8 & May 3 in Portland

Youth in grades 5 & 6 work on problems individually and their scores contribute to the team's score.

Registration deadline: November 1

Website: sites.google.com/a/westbrook.k12.me.us/smeml

ROBOTICS

FIRST LEGO League

Regional qualifiers on November 21 with state championship in Augusta on December 12

Maine's part of the International FIRST LEGO League. Elementary and middle school robotics and science research program.

Registration deadline: September 30

Website: www.mainerobotics.org

FIRST Robotics

TBD in April, Lewiston Colisee

High school teams compete in next spring's FIRST Robotics Competition.

Registration deadline: November 25

Website: www.pinetreedistrict.org

Mainly SPIRIT

September 19, 2015 in Oakland

High school FIRST Robotics Competition Teams compete in this off-season scrimmage.

Registration deadline: September 17

Website: offseason.team2648.com

Robotics Track Meets

April 30, May 7 & May 14; Ellsworth, Oakland, South Portland

Students compete with (and without) robots in 10 engineering challenges.

Registration deadline: April 1

Website: www.mainerobotics.org

VEX Robotics

Qualifying events run November through February, Locations TBA

Teams build VEX robots to compete for a spot in the Maine State VEX Championship.

Registration deadline: December 1

Website: www.robotsinme.org

Washington County Robotics Expo

3rd or 4th Weekend in March, University of Maine at Machias

"Science fair" style expo where 4-H robotics teams from eastern Maine talk with judges and public plus STEM-related workshops and a robotics challenge at the end of the day.

Registration deadline: TBA in fall

Website: www.umaine.edu/washington

MULTI-DISCIPLINARY (STEM)

Envirothon

Regionals: April 27, Unity; May 12, Norway; May 17, Northern ME; May 19, Orland.

State: May 27, Bridgton. Workshop open to anyone: March 18, Unity College

Teams of students are tested in outdoor stations on topics such as soil, aquatics, forestry and wildlife. There is also a current issue problem, sent in advance, for which the team(s) make posters and give oral presentations.

Registration deadline: TBA in March

Website: www.maineenvirothon.org

Maine State Middle School Science Fair

April 2, Location TBA

Middle school students present original research to a state-wide audience of their peers and judges including scientists, engineers, mathematicians, teachers, and other STEM professionals.

Registration deadline: TBA

Email: mssmf@mssm.org

Maine State Science Fair

March 19, Bangor

High school students present original research to a state-wide audience of their peers and judges including scientists, engineers, mathematicians, teachers, and other STEM professionals.

Registration deadline: February 5

Website: www.maine-state-science-fair.org

Meridian Stories

Late March-April, Online

Middle and high school teams respond to creative science and math prompts. Produce videos, upload, get judged, win badges and placement. Environmental Visionaries Challenge: two minute video responding to prompts.

Registration deadline: N/A

Website: www.meridianstories.com

Ocean Sciences Bowl

February 6, University of New England

High school students answer rapid-fire questions about ocean sciences in a double-elimination tournament.

Registration deadline: TBD

Website: www.nosb.org

Science Bowl

February 27, University of Southern Maine

Jeopardy style competition for high school students with questions from all of the STEM fields.

Registration deadline: TBD

Website: science.energy.gov/wdts/nsb

Science Olympiad

March 26, University of Southern Maine

A day filled with all types of science, technology and engineering challenges.

Registration deadline: N/A

Website: sites.google.com/a/waynflete.org/maine-science-olympiad

SkillsUSA

March 3-4, Bangor

The SkillsUSA Maine is the state-level competition for high school and college students enrolled in trade, technical, and skilled service instructional programs including allied health occupations.

Registration deadline: February 12, 2016

Website: www.skillsusamaine.org