Opportunities for STEM and Computer Science Programs

Check out these programs in the area for those interested in STEM fields!

NOTE: Be mindful of the due dates for these programs.

MIT Introduction to Technology, Engineering, and Science (MITES)

MITES Summer is an intensive six-week residential academic enrichment program for high school juniors who intend to pursue careers in science, engineering, and entrepreneurship, especially those from underrepresented or underserved communities. The program is free of charge to participating students, not including transportation.

MITES Semester is a six-month, hybrid learning STEM and college preparation experience for high school juniors that runs June through December. The program is free of charge to participating students and provides engaging, rigorous online courses and weekly virtual webinars, social events, and workshops.

√mathroots

√mathroots is a free two-week mathematical talent accelerator residential summer program hosted by MIT PRIMES for nationally selected high-potential high school students from underrepresented backgrounds or underserved communities.

Research Science Institute (RSI)

Research Science Institute (RSI) is a program of the Center for Excellence in Education hosted in partnership with MIT. This rigorous academic program brings together high school students each summer for six stimulating weeks of advanced research and intellectual enrichment, with a focus on mathematics, science, and engineering. Participants attend college-level classes taught by

distinguished faculty members and complete hands-on research. Open to high school juniors, the program is free of charge for those selected.

Women's Technology Program (WTP)

Women's Technology Program (WTP) is a women-focused program aimed at empowering students from groups that are historically underrepresented in engineering by providing a rigorous four-week summer academic experience that introduces 20 high school students to Mechanical Engineering (ME) through hands-on classes (taught by MIT graduate and undergraduate students), labs, and team-based projects in the summer after 11th grade. Substantial need-based financial aid is available.

Beaver Works Summer Institute (BWSI)

Beaver Works Summer Institute (BWSI) is an intensive four-week program where high school juniors can get a taste of the MIT experience while working on college-level curriculum with other students from around the country. There are a range of courses—from Autonomous Underwater Vehicles to Quantum Software and to Serious Game Design with AI—with concentrations in programming autonomous systems and more! While this program is only open to high school juniors, there are also online programs offered for younger high school students.

Future Maker

MIT Future Makers is a free, six-week summer program that inspires and trains high school and early college students how to design with AI and digital technologies to be positive change makers in their communities. Students learn technical, responsible design, leadership, and entrepreneurial skills through an innovative, hands-on program that combines a 4-week technical curriculum with a 2-week team capstone. Mentors with expertise in AI support students during both phases. The program also includes a webinar series with industry

experts on topics such as how to interview and prepare a resume, oral and multimedia communication skills, teamwork and project management skills, and a wide variety of exciting career opportunities in the AI field. *Use the name Kerri Murphy from Norton and Technovation as a reference when you apply!*

Summer Science Program (SSP)

Summer Science Program (SSP) is a residential program. The curriculum is organized around a central research project in either Astrophysics, Biochemistry, Genomics, or Synthetic Chemistry. The programs are six weeks long and offered at locations in Colorado, Georgia, Indiana, New Mexico, North Carolina, Oklahoma, and Washington D.C. Substantial need-based financial aid — including a "lost wages" stipend for low-income students — is available.

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Other selective summer programs

Most summer programs admit all or most students who can pay the (often high) tuition. However, a number of competitive-admission summer programs select only the best students on the basis of merit and are often free or comparatively affordable. Here are a few of these (in alphabetical order):

Science & research summer programs

BU Research in Science & Engineering (RISE)
Clark Scholar Program

Garcia Summer Scholars
High School Honors Science, Math and Engineering Program (HSHSP)
Secondary Student Training Program (SSTP)
Stanford Institutes of Medicine Summer Research Program (SIMR)
Student Science Training Program (SSTP)
Summer Program on Applied Rationality and Cognition (SPARC)

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Bridgewater State University summer programs
📄 **SSA 25 Flyer.pdf**
A snapshot of the 1st page:

Summer Science Academy

GRADES 10-12 JULY 7-11, 2025
JULY 14 -18, 2025 GRADES 7-9

Session	Date	Time	Grade	Cost
Cybersecurity: From Intern to Cyber Specialist	July 7-11	8:30AM to 2:30PM	Grades 10-12 (Fall 25)	$400
The Human Body from a Medical Mindset				$400
Avoiding a Campus CATastrophe	July 14-18	8:30AM to 2:30PM	Grades 7-9 (Fall 25)	$300
CyberTank: Innovate, Defend, Pitch!				$300

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Wheaton College Programs
Summer Pre-College Program (10-12 graders)
https://wheatoncollege.edu/academics/pre-college-programs/

Summer Institute: (10-12 graders)
https://www.wheaton.edu/wheaton-college-summer-institute/

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WPI Summer programs

WPI's Office of Pre-Collegiate Outreach Programs is excited to announce that registrations and applications for our summer 2025 programs are open!

We will be offering 3:
- **Launch: a commuter program for rising 9-11 graders,**
- **Frontiers: a residential program for rising 10-12 graders, and**
- **College Credit Jumpstart: aa virtual for-credit program for rising 11-12 graders.**

Interested students are encouraged to visit <u>our website</u> to register for Launch, apply to Frontiers or Jumpstart, or learn more information about our programs. All programs are first-come, first-served. Registrations and applications will close on April 30.

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The Summit STEM Fellowship Opportunity:

Over the summer, I help mentor students at the Summit STEM Fellowship, a virtual summer program designed to get students excited about STEM. The fellowship welcomed over 200 students from 30+ countries last year, and we are excited to open applications for the 2025 program. Could you please help share the opportunity with Norton students?

Below is more information about the 2025 program. If you have any questions, please let me know. Thank you so much!

The Summit STEM Fellowship is a virtual summer fellowship empowering future STEM leaders. Open to rising 9th-12th graders worldwide, the fellowship connects students with mentors from

leading institutions including Stanford, MIT, and Harvard, to explore diverse opportunities and career pathways in STEM. The fellowship is a flexible 10-15 hours/week commitment, allowing students to participate alongside other summer activities. Admissions are rolling, and students are encouraged to apply as early as possible. For more information, please visit the fellowship website: www.summitstemfellowship.org. For any inquiries, please contact info@summitstemfellowship.org.

Sincerely,

Trisha Kulkarni
Stanford University | M.S. Candidate, Computer Science '25
B.S. Computer Science '22

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Math summer programs

The American Mathematical Society maintains a large list of math summer enrichment programs, as does the Mathematics Foundation of America's Summer Mathematics Program Consortium.

In general, some summer math programs that our applicants seem to especially like include:

> AwesomeMath
> Canada/USA Mathcamp
> Hampshire College Summer Studies in Mathematics (HCSSiM)
> MathILy
> Program in Mathematics for Young Scientists (PROMYS)
> Prove It! Math Academy
> The Ross Program
> Stanford University Mathematics Camp (SUMaC)
> Texas State Honors Summer Math Camp (HSMC)

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Interdisciplinary or broader summer programs

The nonprofit Davidson Institute maintains extensive lists of both residential and day summer programs across the United States that provide for the intellectual and social enrichment of students.

The National Conference of Governor's Schools (NCoGS) supports development and growth of summer residential governor's school programs across 25 states, dedicated to finding and cultivating students with special academic, creative, artistic, and/or leadership talents.

The QuestBridge College Prep Scholars Program partners with some institutions to send high-achieving, underserved, low-income students to residential and virtual summer programs—with scholarships that cover the full cost of travel, tuition, housing, meals, and supplies.