PRIMES
MIT Program for Research in Mathematics, Engineering, and Science for High School Students (web.mit.edu/primes)

PRIMES students at the Eighth Annual PRIMES conference at MIT, May 2018

MIT PRIMES is a free, year-long after-school research program for high school students, offering projects in mathematics, computer science, and computational biology. This is the only program in the United States that gives students an opportunity to pursue serious research in a university setting at a natural pace, over the period of one year, under the guidance of academic mentors.

- In 2011-2021, 441 research projects completed by PRIMES students;
- All projects presented at eleven annual PRIMES conferences;
- 25 students received Outstanding Presentation awards at MAA Undergraduate Student Poster sessions of Joint Mathematics Meetings;
  - One 1st, three 2nd, three 3rd, and two 4th Grand Awards at Regeneron/Intel ISEF;
  - 1st Prize ($100K scholarship), four 2nd Prizes ($50K), two 4th Prizes ($30K), two 5th Prizes ($20K), 2 national finalists ($25K), 28 regional finalists, and 57 semifinalists at Siemens Competition;
  - Two 1st Places ($150K/$250K), three 2nd Places ($75K/$175K), two 3rd Places ($35K/$50K), three 4th Places ($40K/$100K), 6th Place ($80K), two 7th Places ($70K), 9th Place ($50K), 10th Place ($20K), 29 national finalists, and 97 national semifinalists/scholars at Intel/Regeneron STS;
  - 4 Davidson Fellow Laureates ($50K), 11 Davidson fellows ($25K/10K), and 8 hon. mentions;
  - 19 USA and Global finalists/medalists and 19 USA semifinalists at Yau Science Award.
Currently 53 local PRIMES students are working on individual and group research projects and studying in reading groups in mathematics, computer science, and physical and computational biology. PRIMES-USA, a distance-mentoring research section for out-of-state students, has 36 students. We have established partnerships with researchers from Broad Institute, Carnegie Mellon University, Clemson University, CUNY – City College, Harvard, Indiana University, Princeton, SJSU, SHSU, Tufts, University of Illinois at Chicago, UMass Amherst, UMass Lowell, University of Pennsylvania, and MathWorks, which provide projects for several PRIMES students. PRIMES Circle, a math enrichment section for students with disadvantaged backgrounds from local high schools, has 26 students. The total number of students has reached 115, including 41 girls.

PRIMES Circle students making an expository presentation at MIT, May 2017

Sponsors

PRIMES acknowledges generous support from MIT Mathematics Department, MIT EECS Department, National Science Foundation, Quanta Computer, MathWorks, EHA Foundation, Webster Foundation, Hamilton Foundation, Rosenbaum Foundation, and individual donors. PRIMES is currently seeking funding for the 2021 cycle from sources both within and outside MIT. Please contact PRIMES Program Director Dr. Slava Gerovitch at <primes@math.mit.edu>.

Program Coordinators

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