

PREPARE to MODEL!

FREE RESOURCES at m3challenge.siam.org/resources

Read the Modeling Handbooks

Written by M3 problem writers and judges,

Math Modeling: Computing & Communicating goes
beyond the basic process of mathematical modeling
to technical computing using software platforms and
coding. Math Modeling: Getting Started and Getting
Solutions describes the modeling process. Both are a
must-read for any serious Challenge contender!



Practice your skills

Sample and practice problems will help you prepare for the Challenge problem.

Watch the Math Modeling video series

Seven 2–3 minute episodes that provide instruction about each component of the modeling process.

Access free software

You can request MathWorks' MATLAB or Wolfram Mathematica software for free! Both software licenses come with hands-on tools you can use to prep for and apply to the Challenge problem, and continue to use throughout the year. Look for the "Access Software" tab under RESOURCES on the website. Note that software use, coding, and technical computing are not required to participate or win, but using them can help you become eligible for the extra add-on Technical Computing Award.

Teach Modeling using the GAIMME report

"Guidelines for Assessment and Instruction in Mathematical Modeling Education" (GAIMME) is a great resource for teacher-coaches!

Peruse the "Tips and Guidance" webpage

Suggestions from past participating students, coaches, judges, and from organizers of the Challenge.

Technical Computing?

Teams that use a programming platform other than spreadsheets (Excel or other) in an outstanding way will be eligible for an additional distinction—the M3 Technical Computing Scholarship Award.

Learn Technical Computing is a tab under RESOURCES on the website where you can get direction on using MATLAB software to prepare your solution and possibly qualify for the extra credit award.

MORE WINNING STRATEGIES

Check out the archives m3challenge.siam.org/archives

Archives feature past Challenge problems, winning solutions, judge perspectives, and presentation videos organized by year.

Go on a YouTube binge youtube.com/user/ SIAMConnects

Visit "M3 Challenge" playlist on SIAM's YouTube page to familiarize yourself with all aspects of the Challenge.

TEACHERS AND STUDENTS: Take steps to ensure success in M3 Challenge!

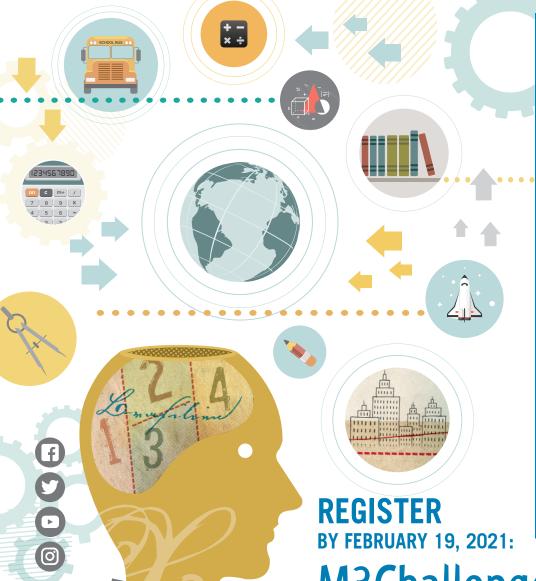
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MathWorks Math Modeling Challenge

\$100,000+ in SCHOLARSHIPS



Challenge Weekend

February 26 – March 1, 2021

- High school juniors & seniors and sixth form students are eligible
- Form a team of 3–5 students with one teacher-coach
- Choose your 14-hour worktime and location for challenge weekend
- Submit a solution to the open-ended modeling problem
- Participation is free and entirely internet-based
- Additional scholarship prizes are available for teams submitting supporting code
- Go to m3challenge.siam.org for rules, resources, and to register online

M3Challenge.siam.org

During Challenge weekend, an open-ended problem is revealed to high school teams and they work together, under time constraints, using the math modeling process to represent, analyze, make predictions and otherwise provide insight into that real-world problem's questions. High schools in the U.S. (including U.S. territories and DoDEA schools) and schools with sixth forms (age 16–19) in England and Wales are eligible to participate in M3 Challenge 2021.



Society for Industrial and Applied Mathematics

