

2023-2024 SECME National Competition Guidelines – Overview



Update your information!

POWERING THE NEW ENGINEER TO TRANSFORM THE FUTURE

Our Team



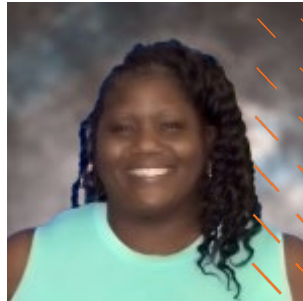
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Interim K-12 Director



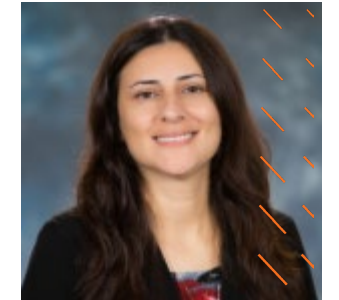
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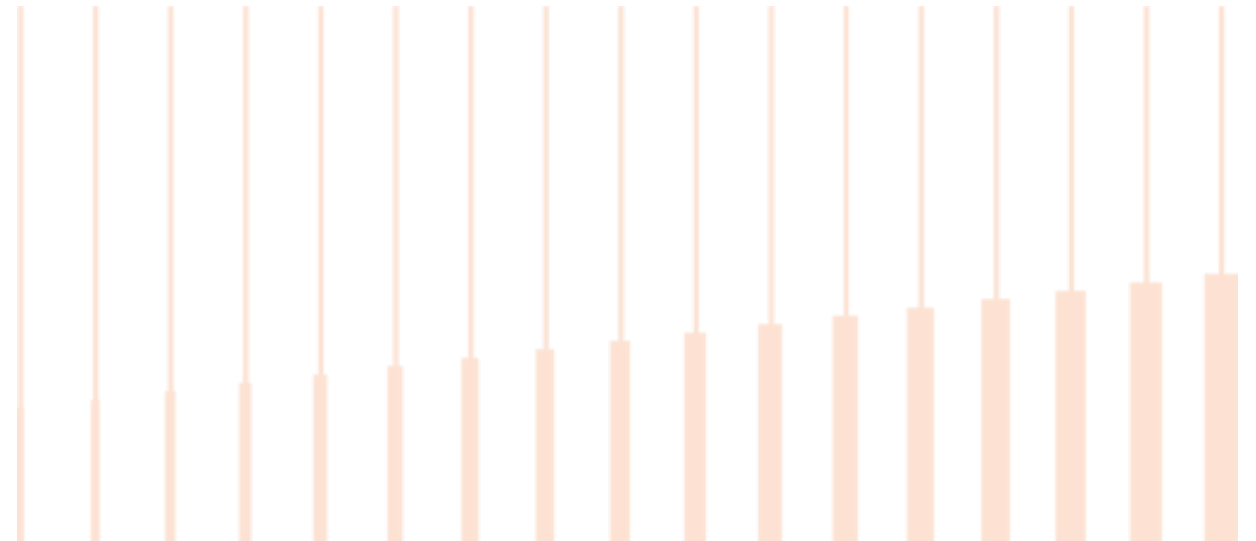


2024 SECME National Competition - Updates



- PDF versions of all guidelines have been posted on our website.
- The following will be shared on the SECME website soon:
 - Scoresheets for all competitions
 - National Policies and Best Practices

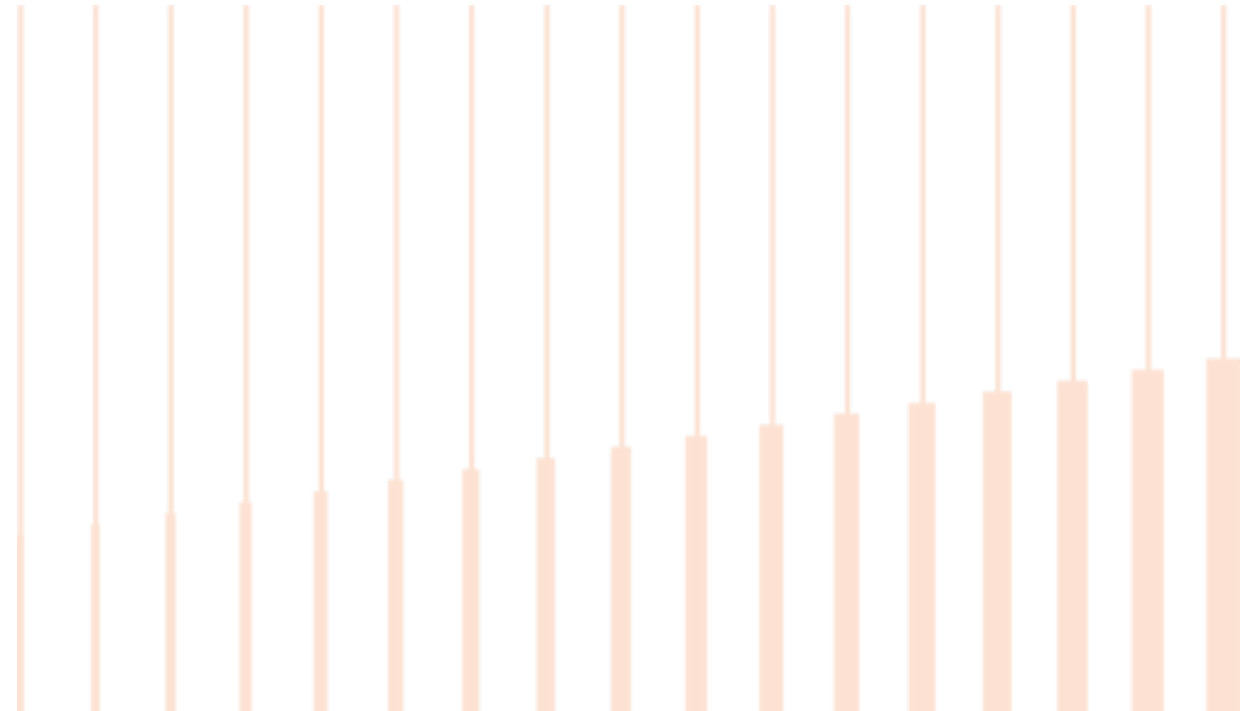
<https://www.eng.ufl.edu/secme/>



Agenda



- Mousetrap Car
- Water Bottle Rocket
- Engineering Notebook
- Presentations
 - Video
- Essay
- New Competitions – National Only
 - Artificial Intelligence (AI)
 - Logo
 - Poster



Mousetrap Car



- Teams of 2 to 4 students
- Performance
 - This year, the performance score will be based on the longest distance travelled, measured in centimeters.
- Presentation Video
 - The presentation video is required **ONLY** for elementary Mousetrap Car teams who place 1st at their Regional Competitions and proceed to the National Competitions.
 - *There is no video component for middle and high school teams at the National level as the students are expected to deliver presentations orally in person.*

Water Bottle Rocket



- Teams of 2 to 4 students
- Performance
 - For elementary teams, the performance score is based on the hangtime, which is measured in seconds using a stopwatch.
 - For middle and high school teams, performance is based on the apogee (peak height), measured in meters using a clinometer.
- Presentation Video
 - The presentation video is required for Water Bottle Rocket teams who place 1st at their Regional Competitions and proceed to the National Competitions.

Mousetrap Car and Water Bottle Rocket

All Divisions



- The Engineering Notebook –

- Think of this Engineering Notebook as a log of the students' work throughout the project.
- Students will record the design process in a physical, hand-written notebook.
- This will be where trial runs and brainstorming is recorded.
- The Engineering Notebook must be brought to the Regional Competition to be evaluated. Rubrics are forthcoming.

- Presentation –

- The presentation replaces the Written Report from previous years.
 - Any platform can be used as long as they are submitted as a PDF.
 - Microsoft Sway, Microsoft PowerPoint, Google Slides, Canva, etc.

- Individual competition
- Students can choose between Non-Fiction or Science-Fiction topics.
 - Updated word count:
 - Elementary, Grades 3-5 (Word Count: 350 – 500)
 - Middle, Grades 6-8 (Word Count: 500 – 750)
 - High, Grades 9-12 (Word Count: 750 – 1000)
- Pre-K to 2nd Grade
 - The Essay competition for this division is an illustration competition.
 - The only written component is a 1 – 2 sentence caption.
 - Video explanation

Artificial Intelligence (AI)



- Teams of 2
- Middle school teams will NOT have programming aspects. They will focus on ethics of AI.
- High school teams will have programming aspects related to applications of AI for chatbots.
- Work through 7 modules by April 30th to be eligible
- In order to participate:
 - Fill out the form on the SECME AI Guidelines page (debuting October 1st)
 - We will contact you with next steps.
 - You will be given access to the modules on our Microsoft Teams

Logo and Poster Design

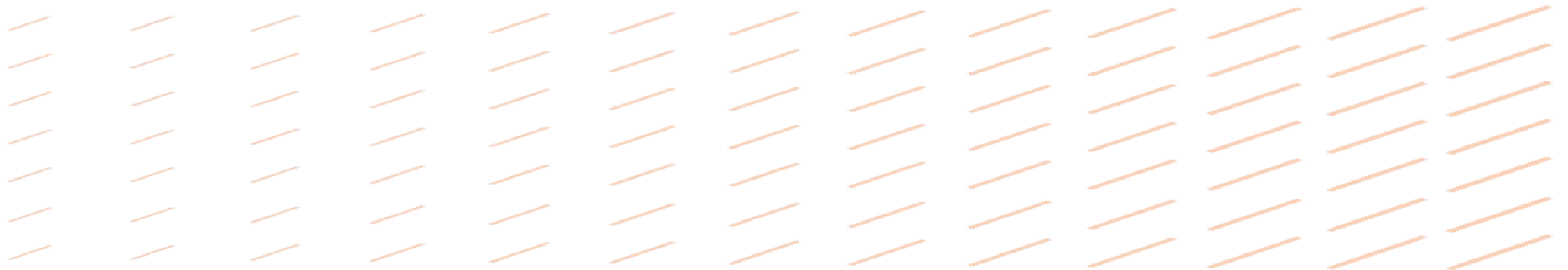


■ Logo

- Individual competition
- Hand-drawn
- Written Component – description / explanation

■ Poster

- Individual competition
- Design can be hand-drawn, digitally created, or AI-generated
- Video Presentation – verbal explanation



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Questions?



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