



MAKE A THON

Competition information,
rules, and regulations

Spring 2024

COMPETITION TIMELINE

25th January, Thursday

Competition informational meeting with organizers and participants, rules released

27th January, Saturday

Last day to register for the competition

28th January, Sunday

Final machine mechanism announced and competition/building time begins

18th February, Sunday

Deadline to submit progress pictures/video

1st March, Friday

The competition ends, all participants bring in their machines to the final judging event. Food will be provided, with an awards ceremony at the end.

GENERAL GUIDELINES

- Each machine must be created entirely within the Build time (1/28/24 - 3/1/24)
- Each machine must be created by either one, two, three, or four Georgia Tech students - no outside help
- Machine supplies cannot cost more than \$75 in total
- Dimensions of machine should not exceed 40"x40"x40"
- The machine must be portable
- The time from the initiation of the machine to the completion of the machine's final mechanism but be between 0.75 and 3 minutes
- The machine must perform the designated task at the end of its operation. That task is to launch a rocket. It is up to the group to design and build the rocket they want to launch, of any size and material. It should appear to the common eye as a rocket, and somehow "launch" itself off of the machine.
- A progress update must be submitted prior to the final competition day, on 2/18/24. This must be submitted to the form that will be emailed to the registered teams. The submission will entail some photo evidence of progress in designing/building the machine. Failure to submit this will result in a 3 point deduction from your final score.



COST GUIDELINES

- Only the cost of the materials that make it onto the final presented machine need to be accounted for.
 - Ex. you use 2 screws from a pack of 10 screws, you report the cost of 1/5 of the entire pack
- An easy to read table should be presented along with your machine at the final judging event.
 - The table should list each material used, the quantity of each material, the total contributed cost by each material, and the total overall cost of everything.
- Things like tape, glue, and aesthetic only features do not need to be counted in the total cost



JUDGING DAY

A panel of three judges (Georgia Tech faculty) will be invited to judge your machines

On the final event day, you will set up/place your machine on a designated table space and the judges will walk around to observe your machines in action (at least 2 people from your team should be at the table, unless you are a group of two people or less)

You/Your team members are responsible for presenting your machine to the judges. Presenting entails your ability to explain the mechanisms and the design/building process of the machine. You are welcome to bring any supplies/visual tools to help explain your machine, but that is not required.

The following rubric will be used by the judges to score the machines, scores will be averaged amongst the judges to give each machine a single final score.

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	1	2	3	4	5
Function	The machine did not complete the assigned task	The machine did not complete the assigned task, but made a worthy effort	The machine completed the assigned task with external help	The machine completed the assigned task with minor issues/unplanned occurrences	The machine fully completed the assigned task, with no issues
Form	No time was put into the appearance of the machine	Some time was put into the appearance of the machine	The machine looks well thought out	The machine looks extremely well thought out	The machine looks extremely well thought out, and goes above and beyond to be aesthetically interesting
Complexity	No mechanical engineering concepts were used in accomplishing the assigned task	1-2 different mechanical engineering concept/mechanisms were used in accomplishing the assigned task	2-3 different mechanical engineering concept/mechanisms were used in accomplishing the assigned task	3-4 different mechanical engineering concept/mechanisms were used in accomplishing the assigned task	4-5 different mechanical engineering concept/mechanisms were used in accomplishing the assigned task
Presentation	The presentation does not explain the functionality of the machine, or how it was made	The team attempts to explain every aspect of the machine	The team clearly explains every aspect of the machines	The team clearly explains every aspect of the machine, and touches on the engineering design process	The team clearly explains every aspect of the machine, as well as the engineering design process
Creativity	The team demonstrates zero creativity in the machine functionality, form, or presentation	The team demonstrates slight creativity with the machine functionality	The team demonstrates creativity with the machine functionality or form, but nothing else	The team demonstrates creativity with the machine functionality and form, but does not have any unique aspects to stand out	In every facet of the competition, the team demonstrates outside of the box thinking, bringing unique ideas to their machine