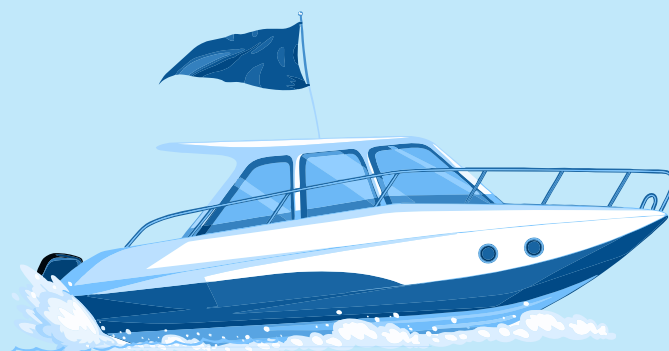




BOAT RACING

CATEGORY

FINAL STAGE RULES

BAKU 2025

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1. Introduction

- 1.1. Boat Racing competition young people and technology knowledge of STEAM enthusiasts to learn, to use to do, artificial with intellect experience to take, will come of technology work principles research, engineering experiences and independent don't think ability development to make encouragement is doing.
- 1.2. This technology shipping in the field application to be main purpose, of course of reserves protection and of the country safety provided is done. Recent academic and industry of research important one part of expenses and of risks more little to be because of above water of work in seeing pilotless transportation of means to study directed. This need suitable as our goal, from afar management which is and either autonomous missions instead of do it who knows pilotless above water transportation of means country inside more wide to the base spread boost giving this of the field in development advanced role is to play.

2. Method of application

- 2.1. Applications will be accepted through the official website of SAF. (<https://saf.steam.edu.az/>)

3. Participation conditions

- 3.1. "Boat Racing" competition given to the rules suitable as teams above water ship preparing will exhibit and in the final will be contested.
- 3.2. Teams from 18 years old top 1 team head and ages 14-17 from 3 participants in the range consisting of should be Every team member to 1 team only join can.
- 3.3. If participant project with other in competitions participation if he did , his participation which he did of the project all details (date, place, organizer, result) to the organizers present should be done.
- 3.4. The same team with only one to the competition appeal to be done can Different from SAF-2024 categories appeal who did the same of the team and either persons applications invalid will be considered.

- 3.5.** Participant teams compete will be held to the ground compete to start most at least 5 minutes left they should come. If compete 5 minutes before the start after 3 players of the team do not be late and or each some to reasons according to If he did not come, the judge will attend who doesn't of the team race that he lost certain does and that one stage on common Honey It evaluates as "0".
- 3.6.** First stage do not be late and either without checking pass don't know whom reasons if any, before the start of the second round before certain done duration during ready when and their ships without checking when passed, teams the second on tour participation to do they can.
- 3.7.** Participation who did teams competition to the soul adhere to should, others with dispute should not and either them insult should not, physical confrontation and either provocation should not create and either other of teams above water to ships damage should not give their belongings without permission they should not take to the rules practice not to do according to penalties in the arena behavior violation to the severity suitable will be competition during unknowingly and either technical reasons for one above water ship to the other if it's worth it and above water from ships each which one if damaged, this the rule violation will not count, engineering mistake will be counted and the game continue will be done.
- 3.8.** Participant teams security from the rules alert should be and own teams and other of employees safety threat who did to behaviors road they should not give. Also, electricity from the lanes illegal use, open from the fire use and competition to the place dangerous of things bringing too it is forbidden.
- 3.9.** Competition during team of leaders and of the team of his companions competition to the field included to be, race to the territory from outside each which in form to the game intervention to do permission not given the team head and either him accompaniment who did person to the team support if it shows and other of teams to their games intervention If it does, the judge warns to do, the team disqualification make and other penalties to give to the right has.
- 3.10.** Every one participant one in the category by competing is limited. The competition duplication, fake registration, competition of the participant your age distortion making, competition of the participants without permission replacement and so on definitely it is forbidden. Obvious when done and event after approval after participant disqualification will be done.
- 3.11.** Participant teams later done changes and in the rules record done all conditions acceptance did are considered.
- 3.12.** In the rules intended unattainable force majeure the head decisions if given coordinators by will be given.

4. Special cases

- 4.1.** Special of cases main reasons with space connected problems and either due to force majeure reasons arising are breaks. Like it cases inspection and from negotiations after answered the chief judge meeting to be held decision to give can.
- 4.2.** Every which of the ship malfunction, errors and either stopping (equipment malfunction and either equipment of communication including failure being, however with this is not limited to) never one rematch will not be held.
- 4.3.** Own personal reasons and either to force majeure reasons according to compete held in space to the race who does not know participants in advance competition organization to the committee information they should give.
- 4.4** It is strictly prohibited to intentionally damage the opponent team's boat or to strike it two or more times in a way that changes its trajectory. In such cases, the referee has the right to impose a penalty or disqualify the team responsible for causing the damage.

5. Choice stage

- 5.1.** Registration after it's over after teams between choice stage will be held and to the final past teams certain will be done. Option 2 stage on conducted.
- 5.1.1.** In stage I participant registration passing through to create what he wants above water ship project about initially evaluation prepares the report (in pdf format). Report it composition:
 - Team about information
 - Project about information
 - Usage will be done electronics and cycle scheme
 - 3D model
 - Your code working of logic explanation
- 5.1.2.** To stage II the name to the participants defined time during given in gauges above water ship should be prepared. Preparation process (during the process security to the rules practice should be If of the team above water ship in advance if it is ready, then don't get ready process in a video file explain should), above water of the ship water impermeability the test, fast maneuver don't do it ability and in water in action while being above water of the ship the video must send (video to the "YouTube" platform must be uploaded , in the video that you are connected to project about information should be given and of the video STEAM Azerbaijan said in a statement to the project by joining connected informations record should be Video duration maximum 1 minute, minimum quality should be 720p).

6. Choice criteria

- 6.1. Evaluation judges by will be conducted.
 6.2. Choice stage for evaluation criteria.

Criteria	Points
Report document submission (correct format)	0 - 50
Preparation of PCB board (the PCB must be designed in professional software such as EasyEDA, Altium Designer, or Upverter PCB, and the circuit simulation must be performed)	40
Hydrodynamic testing of the boat model (should be conducted in software such as Fusion 360, Onshape, or SolidWorks)	80
Originality	40
Connection of the BMS system (the battery voltage must not be allowed to drop below 11.8 V / 22.8 V)	100
Propeller fabrication	15
Hull fabrication	15
Remote controller fabrication	15
Complete assembly of the boat's electronic system from scratch	15
Total	370

- 6.3. **Dimensions** (*Width, length, height will be the longest measurement.*)

Criteria	Points
Vessel $\leq$ 50 cm	40
50cm < Vessel $\leq$ 60 cm	20
60cm < Vessel $\leq$ 75cm	10
75cm < Vessel < 60cm (will not be allowed to race)	0
Total	70

6.4. The mass of the ship

Criteria	Points
The weight of the ship ≤ 8 kg	40
$8 \text{ kg} < \text{Ship weight} \leq 10 \text{ kg}$	20
$10 \text{ kg} < \text{Ship weight} \leq 12 \text{ kg}$	10
$12 \text{ kg} < \text{Ship weight}$	0
Total	70

Criteria	Bal
Showing the work process	0 - 50
Audio explanation of the video	0 - 40
Recording the knowledge learned during the process	0 - 60
TOTAL SCORE (Maximum)	150

7. The final stage

- 7.1.** Ship in the competition given to the rules suitable as teams ship preparing will exhibit and they will compete. Ship of the competition main part - of the participants with the controller of the ships management by doing in a short period of time certain done from obstacles passing and assignments instead of from giving consists of.
- 7.2.** Teams own work processes to show they should prepare a poster for:
- That you will prepare poster 1 page in A3 format should be.
 - Poster provided the subject coverage should do .
- 7.3. Race from 1 stage consists of.** At this stage team with obstacles full in the field certain done route throughout obstacles passing through will compete.
- 7.4. Preparation.** To the teams competition area with familiar to be and water on to test his ship for each 5 minutes per stage time will be given.

8. Competition

- 8.1.** Competition stage a competition of teams field (3 min during) they will compete. Participants competition of the field around given movement in the zone what they want whom movement to do and ships to upset for suitable positions to choose they can.
- 8.2.** Competition stage will compete team given trajectory on movement by doing cleanliness will do teams "Start" whistle with to the race will begin and 3 minutes during they will compete. Most many element cleaner team winner future (of 3 min at the end don't end zone reach who does not know team , cleaned of the elements of the number dependent regardless , he lost account will be done). Water on drone don't end from the zone outside if it stops , time does not stop.
- 8.3.** If ship to the obstacle let's hit out of the ordinary if it doesn't come out and to action continue if it does, it the rule violation does not count.
- 8.4.** Ships obstacles what they want to the trajectory on cleanliness to do can.
- 8.5.** Time without ending too participants what they want on the ground and at the time race stop it they can At this time, from the participants most in front which is team winner account will be done.
- 8.6.** Teams the same at the time finish to the line if it reaches competition again out will be held.
- 8.7.** Competition after it's over after participants judges by prepared results which is to you signature should throw.
- 8.8.** Competition of the field width 4.88 meters long and it is 9.56 meters. Competition of the field height is 1.32 meters.
- 8.9.** Participants all to the rules practice they should do. First rule 10 seconds in violation of the referee penalty application it will do case one how many times 10 points from the ruling team if repeated come out can and either that one the team disqualification to do can.
- 8.9.1** The elements to be placed on the water will be selected randomly. The overall dimensions of each element will not exceed 15 cm in any direction.

9. Competition Area

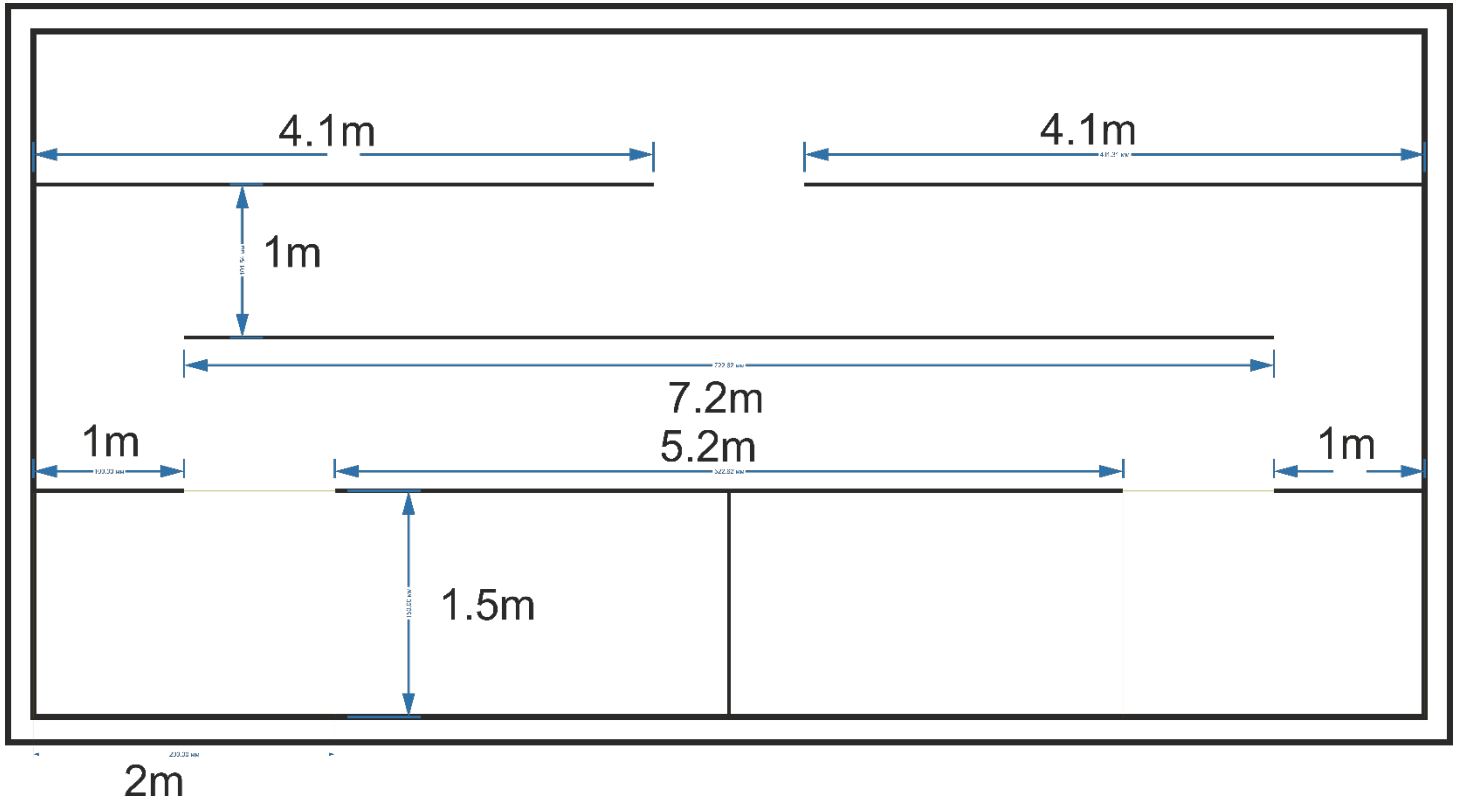


Figure 1

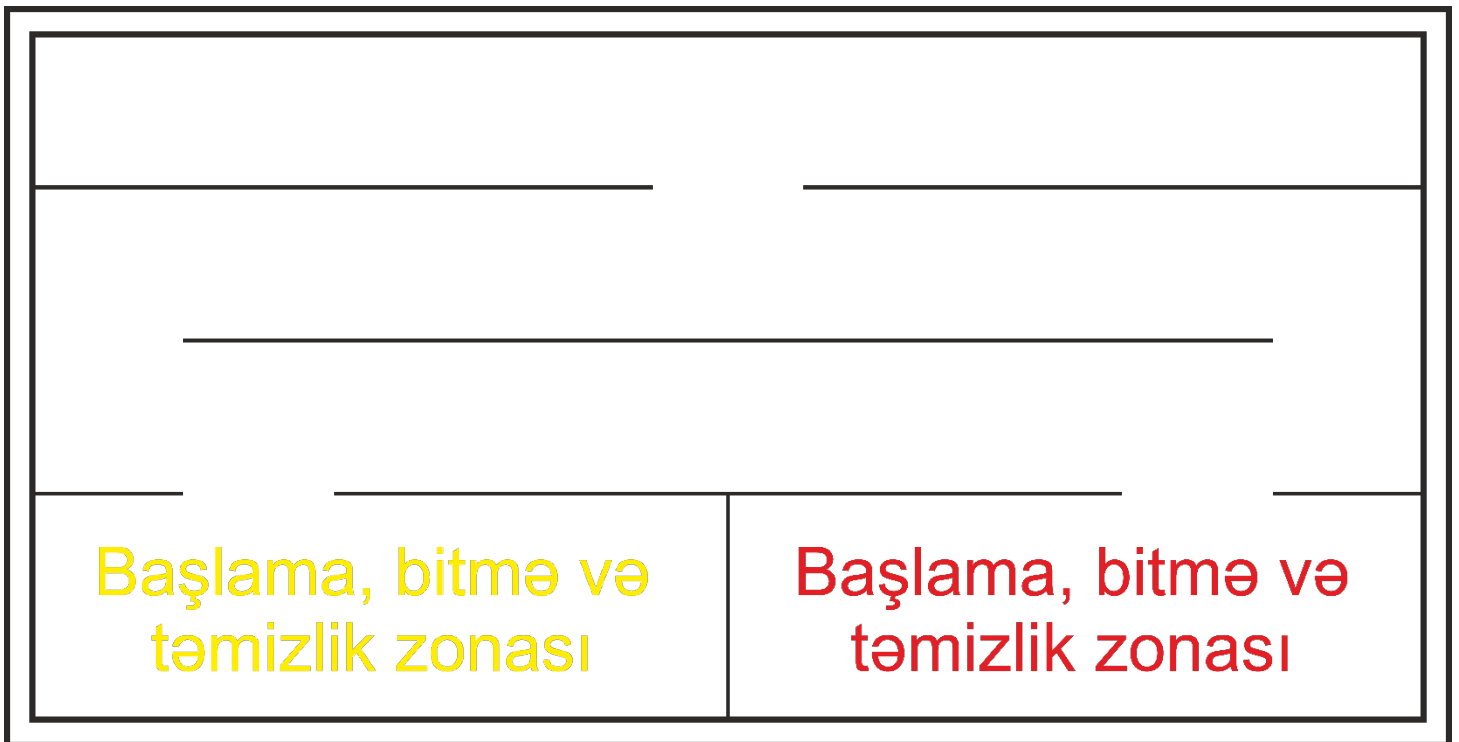


Figure 2

10. Obstacles dimensions

10.1. Pool inside movement lane throughout obstacles placed . Obstacles size on the picture record has been done.

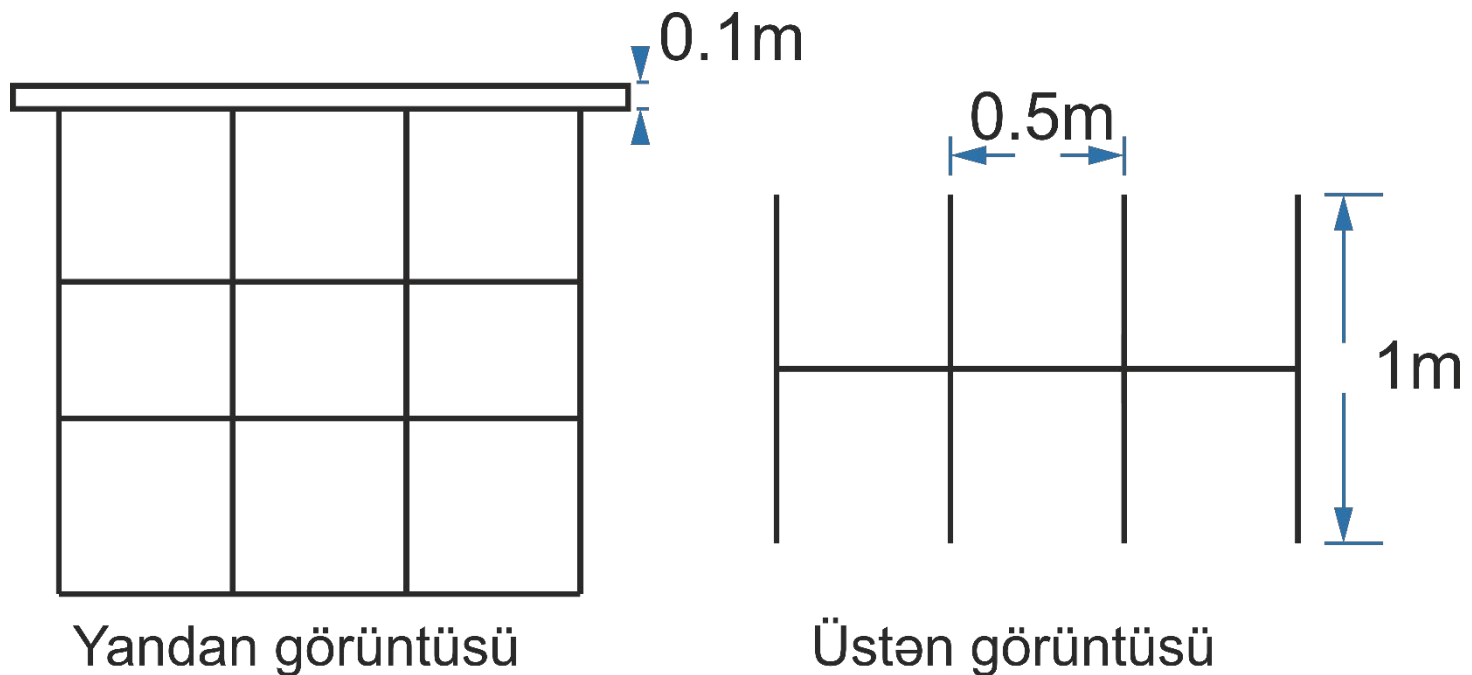
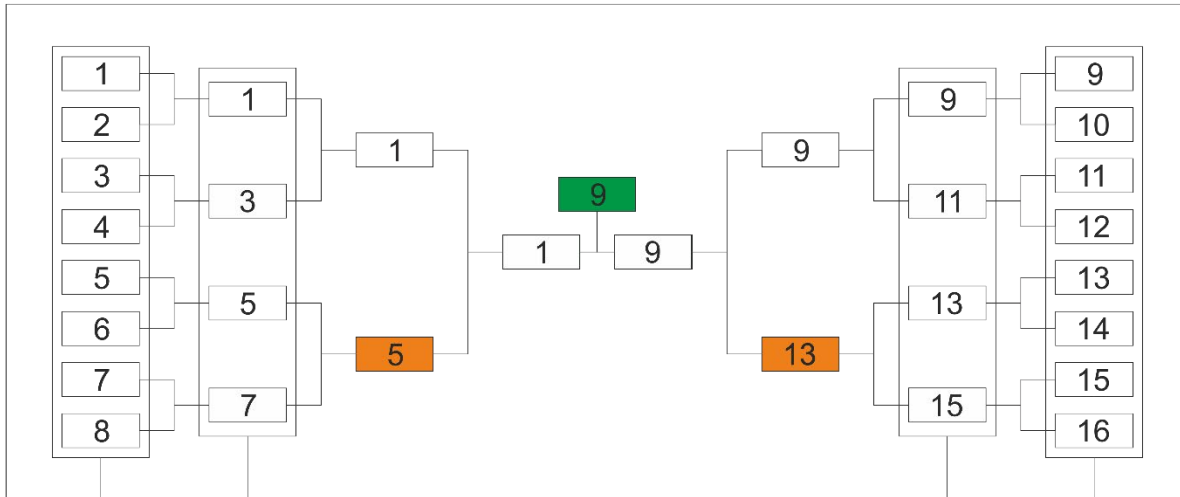


Figure 3

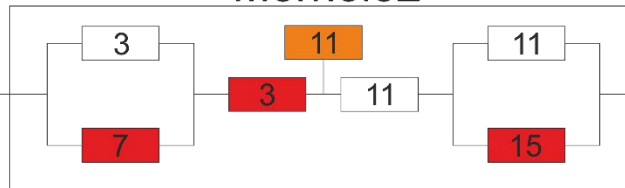
11. Evaluation

- 11.1.** Teams "Start" whistle with to the race they will start and 3 minutes during will compete, most many cleanliness who did team winner the future every in the race two team will compete and winner which is next to stage will pass.
- 11.2.** Draw way with selected teams the following scheme on they will compete. Team each some for the reason to the race if it doesn't come, automatically defeated happens and competitor team winner it happens.
- 11.3.** Teams "Start" whistle with to the race they will start and 3 minutes during they will compete. 3 minutes during don't end zone never one team reach if he doesn't know, don't stop zone most near team winner account will be.
- 11.4.** Additional as two team "Jury Award" and "Design Award" nominations on will be rewarded.

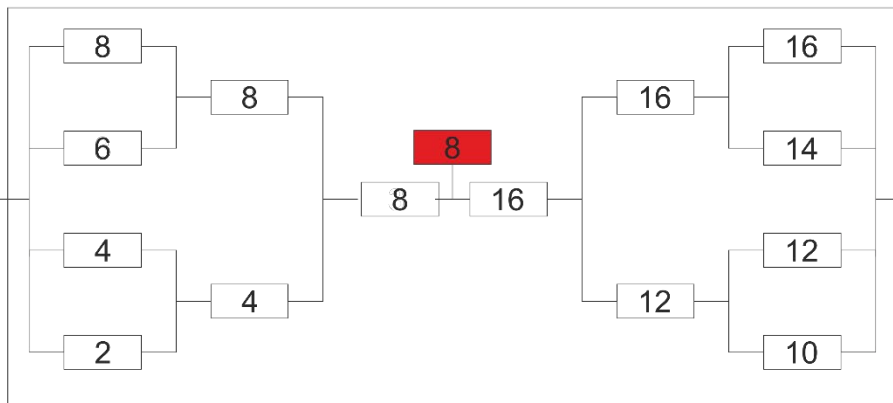
Mərhlə1



Mərhlə2



Mərhlə3



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- 2-ci yer
- 3-cü yer