

# The Singapore AUV Challenge 2026

## Rulebook

Current Rulebook  
version

**6.0.1**

Last updated on  
**15 Oct 2025**

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## Objectives

The goal is for each team to develop an Autonomous Underwater Vehicle (AUV) which can negotiate the tasks put forth under a prescribed time and at the same time, to learn about underwater robotics and have fun in the process.



▲ Figure 1: The SAUVC 2017 Participants.

# Structure of the Team

A team may consist of up to **11 participants**.

## Student Category

- Any **faculty advisors** count towards the maximum of 11 participants.
- At least half of the participants must be full-time students at the time of registration.

## Open Category

- If you don't meet the student category requirements, you can still participate in the open category.



# The Singapore AUV Challenge

## IEEE OES Singapore Chapter



▲ Figure 2: One of the teams with faculty advisors from the 2017 Competition.

## Video Submission

All teams have to submit a video of their AUV prior to the competition. The video **HAS TO**

- be **maximum 30 seconds** long,
- be submitted before 23:59 4th January, 2026, [Anywhere On Earth](#),
- showcase the tether-less operation of AUV swimming underwater for at least **10 seconds**.
- show clearly that someone pressing the [Kill Switch](#) should stop all thrusters immediately.

**Note: The video will not be played beyond 30 seconds, so whatever you want to showcase, must be done strictly within the 30 seconds.**

Donts: For your video, DO NOT

- put the most important parts of the video after 30 seconds (safety, control etc.), as

it will not be reviewed, without exception.

- you do not need to showcase an intro of team structure, university details etc - this will only take up valuable time in your video.

Videos will be reviewed by the organizing committee and **35 teams with the best vehicles will be short-listed to attend the competition. The above criteria are the basic necessary criteria, failing which the teams won't be short-listed.**

The organizers reserve the right to publish the video submissions after the competition.

# Updates to the Rulebook

The rulebook will be updated in from time to time. The latest version of the rulebook will be available on the [SAUVC website](#). It is the responsibility of the teams to ensure that they are following the latest version of the rulebook.

**This is a preliminary version of the rulebook. The final version will be published in the next few months.**

# Safety

- AUVs must not leak and pollute the pool.
- AUVs must be designed and manufactured as to pose no danger of any kind to anyone or anything at the venue. This includes making sure that thrusters/propeller blades are shrouded.
- AUVs **must have a kill switch** that turns off the vehicle including thrusters, or any other propulsion mechanism.
- The kill switch must be **easily accessible** to a diver. This must be marked in bright color.
- Pressure of any compressed gas used must not exceed **6 bars**.
- AUV must be completely autonomous.
- The use of explosives, fire or hazardous chemicals is prohibited. Certified lithium batteries are allowed.
- If lasers are used, they must be of class 2 or lower. Care must be taken to protect all persons at the venue from harm. Beams must be oriented in such a fashion



that they cannot shine into the eyes of the spectators.



▲ Figure 3: Example a kill switch on an AUV from 2015 Competition.

## Others

- The legitimacy of any actions not provided in this rulebook will be subject to discretion of the **Judges**.
- The dimensions, weights, etc. of the field, facilities and equipments stated in this rulebook have a margin of error of  $\pm 5\%$  unless otherwise stated. However the dimensions and weights of the AUVs as stated in the rule book are the maximum and cannot be deviated.
- The **Judges** may demand additional explanations on safety issues when the safety of a vehicle is deemed to be in question.

## Feedback

If you spot any errors in the rulebook or have queries about the rules, please email [rules@sauvc.org](mailto:rules@sauvc.org) or contact us through [our website](#).