

Skills Video Guidelines

RoboSub 2021 (Online)

www.robosub.org

Strong communication skills are critical to bringing your project to life. Whether you are presenting in person or through video, you must deliver your ideas in a clear and convincing manner. Project supporters, such as supervisors, sponsors, or advisors must understand your ideas, and be convinced of their potential.

Students are invited to share the maturity of their system developed for RoboSub 2021 by submitting a series of short technical videos. This visual effort is meant to showcase the team's approach, decision and challenges while evaluating ability to communicate effectively.

This video will be scored and will be published online on the [RoboNation YouTube Channel](#).

Video Content

Students should prepare a series of short videos outlining approach and know-how of at least one (1), and not more than two (2), of the four (4) following technical topics:

- 1) Hull Design
- 2) Power Management
- 3) Propulsion System
- 4) Sensor Optimization

Videos should address the following categories:

Introduction (Less than one minute, </1 minute)

Team members who are presenting on the video, should introduce themselves (name, academic discipline and level of education) and highlight their role and relevance to the topic. All team members are not required to make an appearance.

Sub-system Overview (</2 minutes)

This section should contain a brief overview of the Autonomous Underwater Vehicle (AUV) sub-system requirements of the topic selected.

Competition Strategy (</4 minutes)

Teams should discuss their competition strategy, based on the topic they have selected. This section should also discuss rationales for design and assign a confidence rating (for successful completion) for tasks the team is planning on attempting.

Development and Testing (</4 minutes)

Realizing that teams may or may not have been able to test their vehicles, this section should address the efforts that teams have safely exercised to continue development of their system. Describe the types of testing efforts planned and/or implemented during your development cycle (component, software, and simulation).

Video Format Requirements

1. Teams must abide by all applicable social distancing protocols.
2. Video must be no more than eleven (11) minutes in length.
3. Video may or may not include graphics, vehicle performance and/or simulation. These elements themselves will not affect scoring but may be utilized as tools.
4. Videos must be submitted in .MP4 format.

How-to: MPEG Streamclip

To compress the video, please use the following:

- Format: .MP4
- Compression: H.264
- Quality: 50%
- Sound: MPEG-4 AAC 128 kbps
- Frame Size: Unscaled

Here is an example of the MPEG Streamclip settings:

