

DEEP DIVE

CATEGORY

TECHNICAL REPORT

BAKU 2025

Introduction

This initial assessment report for the Deep Dive category selection round should be prepared based on the tasks listed below.

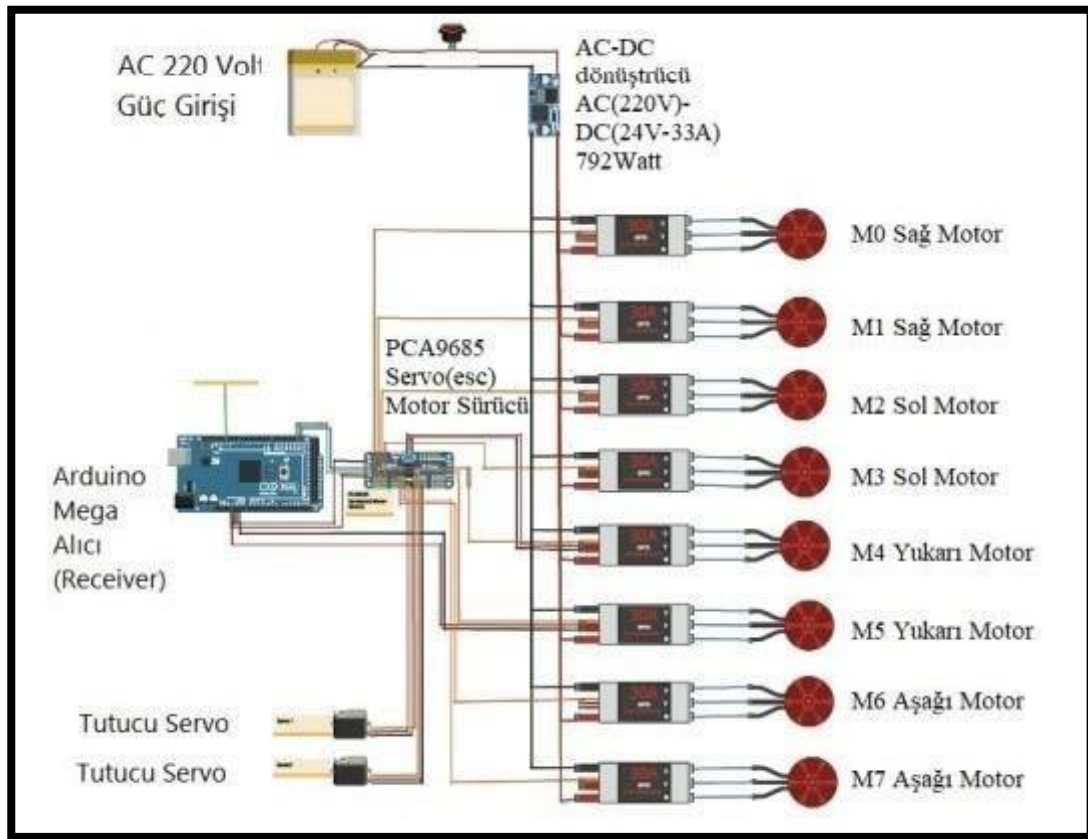
1. Team Information

- 1.1. Provide information about the team, and explain the roles and responsibilities of the members.
- 1.2. Describe the team's experience, achievements, and future plans.

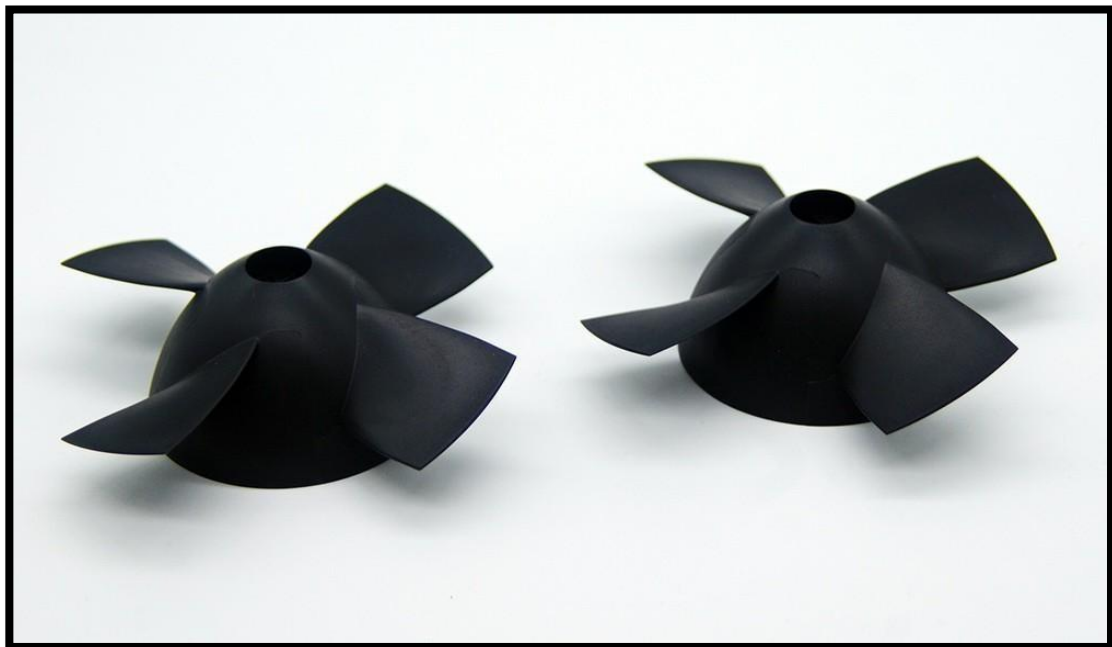
2. Project Information

- 2.1. Explain the purpose and main features of your Deep Dive project.
- 2.2. Emphasize the advantages the project will offer to users and its innovativeness. (Design, speed, aero/hydro dynamics, energy consumption, etc.)
- 2.3. Attach an image of the electronics and circuit diagram to be used (You can build your circuit in Fritzing, Tinkercad, Solidworks, or other programs).
- 2.4. Present the electronic components you used (**the elements shown here are conditional**):
 - AC 220 Input
 - AC/DC Converter
 - Arduino Mega
 - Stop Button
 - PCA9685
 - 30A ESC
 - Brushless motor
- 2.5. Explain the functions of the electronic components, how they are connected to each other, circuit diagrams, operating principle, control mechanism, and usage procedures.
- 2.6. The initial assessment report file must be sent in **PDF** format.

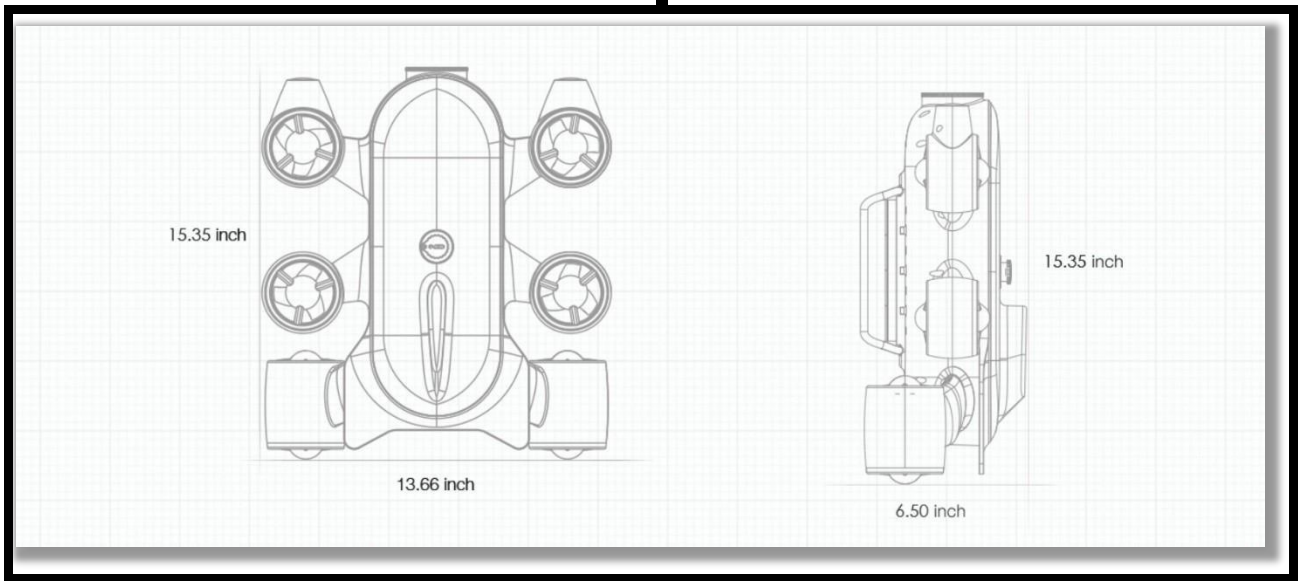
Note: Review the rules carefully. For comfortable maneuvering with the underwater drone in the competition area you will be given, the correct design and speed must be chosen.



Underwater Drone Electronic Circuit



Propeller design



Drone design