Design and build a ROV that can submerge and operate up to a depth of 3.2 meters.

Implement an underwater camera with a visual range of 3 meters that is viewable at the operator’s station.

Incorporate an operation tether to allow ROV operations within the test range.

A power conversion system located on the ROV (as per competition requirements) that reduces the provided 12V down to levels needed to operate the individual systems as needed.

ROV not to exceed a total current draw not to exceed 25 amps.

A propulsion system that will move the ROV through water horizontally and vertically.

Some form of payload manipulator that can handle a max load of 2 Newtons underwater.

Design a submersible temperature unit to measure the temperature of a simulated thermal vent with an accuracy of +/- 4◦.