

Intermediate Underwater Robotics

MATE Center and Arizona Project WET



Design * Innovate * Integrate



ADVANCE YOUR ROV SKILLS

With

The TriggerFish ROV: Joysticks and speed control with four motors

DATES: July 22-26, 2019

LOCATION: University of Arizona – Ag Education Center, 4101 N. Campbell Ave, Tucson, Arizona

DESCRIPTION: This workshop introduces participants to the SeaMATE TriggerFish ROV and the art of accomplishing bi-directional motor speed control using the Sabertooth motor controller.

Workshop topics will include:

- Engineering Design
- ROV Missions and Project Management
- Classroom Management of Engineering Projects
- Building Frames out of materials other than PVC
- Electronics and ROV Control Systems
- Buoyancy and Ballasts
- Cameras, Tools and Sensors
- Running a competition at your school & participating in the MATE ROV Competition

WHO SHOULD ATTEND: Educators who have experience building simple switch box ROV controllers (such as the SeaMATE AngelFish or PufferFish ROV) or faculty who have a background teaching robotics, electronics, physics, or a related discipline. All faculty attending should have concrete plans to implement these activities in the following academic year.

COST: To ensure participant success, there is a \$800 materials fee for this workshop. Participants will return to their school or organization with a TriggerFish ROV Kit and a camera system. Transportation to and from Tucson and lodging is the responsibility of the participant (limited travel stipends are available for participants with more than \$400 of airfare).

APPLICATION: Application screening starts April 10th; after that time we will accept applications until the workshop is full. We plan to notify participants of their acceptance mid-April.

[FILL OUT AN APPLICATION](#)

If the link is not working go to:

<https://www.emailmeform.com/builder/form/7VapTbdmF730d0fOE02xJkD6>