SeaMATE

Where classroom learning meets workforce-ready skills.

Essential tools and resources for educators bringing MATE into the classroom.

Bringing MATE into your classroom or after school program is easier than you think. **Here's a quick Q&A to get you started!**

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What is MATE and how does it align with workforce development?

MATE uses hands-on underwater robotics to connect classroom learning with real-world applications and careers. Through designing, building and testing ROVs (aka remotely operated vehicles), students develop practical skills in engineering, electronics, critical thinking, teamwork, and problem-solving — the same skills in demand across today's workforce.

The SeaMATE Store provides the essential tools to make this possible — offering affordable and accessible ROV kits, components, and resources that make it possible for teachers to bring marine technology to life in the classroom. Each kit is designed to grow with your students, supporting skill development from introductory builds to advanced engineering projects.

Are there lesson plans or instructional guides to help me teach with the kits?

Yes! Each SeaMATE Kit includes detailed, ready-to-use building guides. For example, the AngelFish ROV Kit Building Guide walks you and your students step-by-step through building, wiring, and testing your ROV, while also connecting lessons to real-world science and engineering concepts.

These materials include classroom activities, build instructions, safety tips, and alignment with educational standards and learning outcomes — everything you need to confidently bring hands-on underwater robotics into your course.

Are there workshops or other training opportunities available for educators?

Yes! The MATE ROV Academy offers dedicated professional development workshops and training tailored to educators. These sessions provide hands-on experience with underwater robotics, examples of how to integrate MATE into your classroom or after school club, and connect you with a community of educators who learn and grow together.

Can students transition from classroom builds to participating in the MATE ROV Competition?

Yes! Classroom ROV builds naturally lead into the MATE ROV Competition, where students apply what they've learned to solve real-world marine technology challenges. Teams start by using their SeaMATE kits in class, then expand their designs, develop technical reports, prepare engineering presentations, and practice mission tasks to prepare for regional events.

From there, top teams advance to the MATE ROV World Championship, connecting classroom learning to a global community of learners, exposing students to careers and allowing them to start building their peer and professional networks (which may one day lead to a job!).

AngelFish ROV Kit

ELEMENTARY — MIDDLE SCHOOL

The **AngelFish ROV Kit** includes all essential components for power, control, and movement — students design their own frames and collection tools using local materials or purchasing one of SeaMATE's popular frame kits.

- **Unassembled** *(Available assembled)*
- **$255 USD** *($340 assembled)*
- **Beginner**
- **SCOUT**
- **6-12 Hours**
- **Not included**
- **Included**
- **Standards Aligned**

PufferFish ROV Kit

MIDDLE — HIGH SCHOOL

The **PufferFish ROV Kit** builds soldering and advanced electronics skills through the assembly of a durable control box with LED indicators, a voltmeter, and a printed circuit board. Students gain hands-on electrical experience while designing their own frames from local materials or using one of SeaMATE's popular frame kits.

- **Unassembled**
- **$335 USD**
- **Beginner/Intermediate**
- **SCOUT/NAVIGATOR**
- **8-16 Hours**
- **Not included**
- **Included**
- **Standards Aligned**

TriggerFish ROV Kit

MIDDLE — HIGH SCHOOL

The **TriggerFish ROV Kit** introduces advanced piloting with dual joystick control and variable speed. Built for up to 15 amps, it includes thrusters, wiring, and a sealed control box with LED indicators and video capability. Students design their own frame, applying engineering skills.

- **Unassembled**
- **$950 USD**
- **Intermediate**
- **NAVIGATOR/RANGER**
- **30-40 Hours**
- **Not included**
- **Included**
- **Standards Aligned**

Barracuda ROV Kit

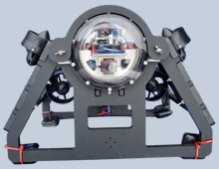
HIGH SCHOOL — COLLEGE — UNIVERSITY

The **Barracuda ROV Kit** combines advanced control, coding, and expandability in one system. Featuring an Arduino-based controller, dual joystick inputs, and video capability, it lets students expand their creativity and program sensors, relays, and motor behavior.

- **Unassembled**
- **$1350 USD**
- **Advanced**
- **RANGER/PIONEER**
- **40+ Hours**
- **Not included**
- **Included**
- **Standards Aligned**

Eagle Ray ROV Kit

COLLEGE — UNIVERSITY



The **Eagle Ray ROV Kit** (go birds!) is built for advanced performance and power. Featuring a 48-volt system, it's designed for PIONEER and EXPLORER class teams ready to push their ROV builds further. **Stay tuned for the release!**

COMING SOON