



Marine Advanced Technology Education Center



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The Marine Advanced Technology Education (MATE) Center was established as an Advanced Technological Education (ATE) Center of Excellence in 1997 with funding from the National Science Foundation and currently continues as an NSF ATE Resource Center. Headquartered at Monterey Peninsula College (MPC) in Monterey, California, the Center is a national partnership of community colleges, high schools, universities, informal educational organizations, research institutions, marine industries, and working professionals. MATE's mission is to improve marine technical education and increase the number of highly-skilled technical professionals who enter ocean-related occupations.

As a Resource Center for marine technology education, the MATE Center:

- ▶ Expands and strengthens academic, industry, and professional society partnerships.
- ▶ Supports institutions interested in developing or improving marine technology programs.
- ▶ Researches, synthesizes, and disseminates comprehensive, up-to-date marine workforce information and helps partners align their curricula and programs with workforce needs.
- ▶ Conducts regional and international Remotely Operated Vehicle (ROV) competitions that simulate the high performance workplace and build academic and industry partnerships.
- ▶ Offers faculty development institutes for high school, college, and university educators that focus on marine technology (including submersible technology; seafloor mapping and data collection; career awareness; the marine applications of GIS) and improving science, technology, engineering, and mathematics (STEM) education.
- ▶ Provides at-sea and shored-based internships with a focus on increasing the numbers of underrepresented students participating in the program.
- ▶ Disseminates MATE products, including curricula, resource books, occupational guidelines, competencies, and procedural guides both in traditional formats and electronically through the Center's web site and www.OceanCareers.com.

The MATE Center is a leading organization for supporting, enhancing, and expanding marine technology education at community colleges, high schools, and universities. The ocean economy is large and diverse, accounting for twenty percent of our national economy and supporting one in six jobs in this country. Marine technology is vital to national security, transportation and commerce, energy and exploration activities, telecommunications, recreation and tourism, fisheries and aquaculture, search and recovery, environmental assessment and regulation, and research. Although these economic sectors are diverse, the technology behind them has many similarities. These include: the collection and use of data from remotely operated vehicles and acoustic instruments; the use of advanced computing systems, such as GIS, for organizing and managing data; and the use of electronics and microelectronics for power, controls, and miniaturization in a remote, harsh environment. The need for highly qualified technical professionals who can design, build, operate, and maintain this technology has never been greater. A concerted effort is required to ensure that our workforce is prepared for an economy currently and increasingly dependent on ocean activities and the technologies that make these activities feasible.