

My Marine Technician Career Path by Emily Shimada (MATE Long-term Intern, 2018)



In 2014 I resigned from my administration job and went back to school to be a licensed marine engineer. I worked hard to excel academically, became involved in student government and professional societies, and basically said “yes” to as many volunteer activities and learning opportunities as I could. I received several academic achievement and professional competency awards during my time there and thrived particularly due to my involvement in the nascent oceanography department.

I founded a very active Oceanography Club on campus and was heavily involved in launching the first student research cruise series in 2016, which quickly expanded it into a semester-long course with weekly cruise planning, station sampling, and instrumentation maintenance. That same year, I interned with the USGS Water Quality Group to conduct monthly water quality sampling of the San Francisco Bay on the *R/V Peterson*. By the time the opportunity to plan and host the first annual MATE Regional ROV Competition on campus came around, a career in the marine science field was at the top of my list. At this point, working in an engine room on a large oil tanker or container ship just wasn’t going to cut it. Marine Technician work was the ideal career path I did not previously know existed and the training and education I received leading up to graduation gave me the tools to pursue this passion for marine science while getting my hands dirty solving problems and helping get science done at sea.

The MATE internship was a once in a lifetime opportunity and one of the most exciting and worthwhile experiences I could have ever hoped for. During my six month internship I traveled thousands of miles from Iceland to Southern California and to the Arctic Circle above Alaska on four different research vessels. I deployed and recovered coring equipment and large moorings, assisted in ROV and AUV launches, conducted CTD casts and net tows, and worked on a variety of electrical, networking, and documentation projects. I met dozens of bright and motivated scientists, worked with the best in the business, and would do it all over again in a heartbeat!

Being out at sea shadowing marine technicians and taking on a variety of maintenance and operational duties is the most immersive, hands on deep dive into our international community of research institutions and UNOLS research vessels. You quickly learn that the most dynamic and interesting aspect of being a marine technician is that the needs of every science party differ widely. It is the marine technician’s responsibility to make sure the science mission operations happen smoothly and that the science party has what they need.



I recommend this opportunity to those with a passion for science, sailing, and engineering. If you are willing to put in the time and work, then you will get so much out of it and be ready to enter the marine technician community with the support of your colleagues and the confidence to enter the workforce with valuable and unique experiences under your belt.

Career Path Chronology

- 2015**
 - Declared Marine Engineering Technology major with a minor in Marine Science at CSU Maritime Academy
 - Founded and President of the Cal Maritime Oceanography Club and campus chapter of North American Marine Environment Protection Association (NAMEPA)
- 2016**
 - Completed Internship with Maersk Line Ltd. 4500 TEU container ship and realize engine room work is not satisfying – research vessels or bust!
 - Received CSU COAST Grant to set up incubation experiments for water quality
 - Was elected Vice President of Student Affairs for Associated Students
- 2017**
 - Completed Internship with USGS Water Quality Group
 - Became Cadet Chief Engineer for upperclassman training cruise
 - Received CSU Trustees Award – William Randolph Hearst Scholar
- 2018**
 - Passed exams for USCG 3rd Asst. Engineer Unlimited License
 - Founded the MATE ROV Regional Competition inaugural event for Northern Bay Area schools
 - Graduated Cum Laude from CSU Maritime Academy with BS in Marine Engineering Technology and minor in Marine Science
- 2018**
 - **Completed MATE Long-term Internship with WHOI, Scripps, and STARC**
 - Hired as full-time Marine Technician for Woods Hole Oceanography Institution
- 2019**
 - Invited to serve as a UNOLS MERAS Committee Member
- 2020**
 - Hired as full-time Marine Technician for Oregon State University