NU Marine Community and Outreach

NU Marine is committed to developing autonomous systems that solve real-world engineering challenges while actively cultivating the next generation of STEM leaders within our region. Our community and outreach activities bridge the gap between advanced marine robotics and accessible STEM education, directly engaging students, future engineers, industry partners, and the broader public.

University Open Days and Careers Expos

At University of Newcastle Open Days and careers expos, NU Marine stalls serve as a primary platform to connect with prospective and current engineering students, their families, and industry partners. Our team uses physical displays—including hardware from our unmanned surface, aerial, and underwater vehicles—alongside live simulation demonstrations to spark curiosity and drive conversations about control systems, mechanical design, and sensor integration. We highlight how undergraduate study can directly involve real-world autonomous systems development while engaging with industry guests to foster collaborative pathways. These stalls consistently generate strong engagement, inspiring prospective students and showcasing career trajectories in mechatronics engineering.

Prospective Student Workshop Visits

Throughout the year, NU Marine opens its workshop doors to prospective university students, giving them an insider’s look at what we are up to. We guide visiting student groups through our design, fabrication, and testing spaces, providing a firsthand look at an active engineering project lifecycle. During these visits, team members showcase custom components, sensor arrays, and software architectures while explaining the engineering trade-offs made during development. By giving prospective students direct exposure to our autonomous platforms and workspace, we showcase real-world STEM applications and help bridge classroom theory with practical engineering.

Facilitating "Mariners on a Mission"

Demonstrating our commitment to hands-on STEM access, NU Marine facilitates the *Mariners on a Mission* (MOAM) program within our own workshop. Delivered by our sponsor, RDA Hunter, in collaboration with Marine, the program gives high school students practical exposure to maritime robotics. In partnership with the MOAM team, we supply dedicated workspace, workbenches, electronics, motors, and a testing tank. Beyond providing physical infrastructure, our team members serve as technical mentors throughout the day, guiding students as they design, assemble, and troubleshoot their own marine vehicles across buoyancy principles, wiring, and motor control. By sharing our facilities and equipment, NU Marine helps RDA Hunter lower the technical barrier to entry for local schools, empowering students to tackle hands-on engineering challenges in a university workshop environment.

Together, these outreach initiatives reflect NU Marine’s dedication to technical leadership, mentorship, and inspiring the next generation of engineers in our community.