

Outreach

MENTORING

Mecatron was founded by a group of students driven not only by a deep passion for learning and innovation, but also by a strong commitment to sharing our knowledge with others. Developing autonomous underwater vehicles (AUVs) deepens members' appreciation for experiential learning, inspiring them to design and lead hands-on workshops aligned with their expertise. These workshops are tailored to engage diverse student audiences, from undergraduates seeking to upskill themselves to younger learners exploring engineering-related career paths.

2-Day EduBoat Workshop for Engineering & Tech Programme Scholarship Scholars (Jan 2026)

This workshop was conducted for recipients of the Engineering and Tech Programme Scholarship (ETPS). About 100 pre-university students explored mechanical, electronic, and software concepts by building an autonomous boat. The experience gave students a comprehensive, hands-on introduction to STEM through collaboration, creativity, and problem-solving.



Blender3D: Product Staging (Mar 2026)

While most courses aim to introduce Blender3D as a modelling software, this course aims to introduce Blender3D as a staging software to visualize ideas quickly. Held over two sessions in March 2026, this workshop enabled ~60 undergraduates across multiple disciplines (business, arts & engineering) to familiarise with Blender3D basics. Greater focus was placed on the staging tools of Blender such as lighting, animation and camera tools..



COMMUNITY ENGAGEMENT

Beyond competitions, Mecatron members are passionate about community engagement to share about their work, their vehicles, and the exciting field of marine technology with others. From school visits to public showcases, members seek opportunities to raise awareness about marine issues and spark curiosity about the real-world applications of marine robotics, such as underwater inspection and ocean monitoring.



NTU CoE 'Live It Up' Event DIY Robotic Arm Workshop

Organised by the College of Engineering, Nanyang Technological University, this 3-day event in August 2025 aimed to "bring engineering to life" for pre-university students, with interactive exhibitions, exciting workshops and informative sharing sessions. Mecatron hosted a "DIY Robotic Arm Workshop" where participants had the chance to assemble and program their very own robotic arm from provided parts. We hope to spark students' interest in engineering, encouraging them to consider it not just as a field of study, but also as a potential career.

Maritime Robotics Gathering Sharing Session on RoboSub 2025

Organised by Singapore's Ministry of Defence Future Systems and Technology Directorate, this maritime robotics gathering brought maritime teams from Institutes of Higher Learning and industry speakers together. As a first-year RoboSub team, Mecatron had 15 - 20 minutes to share about our AUV's technical design and our competition experiences - not just about the technical lessons learnt, but also reflections on team SOPs. Overall, this was a great networking opportunity!



NTU Open House 2026 Showcase + 3D Pen Activity

Mecatron supported the College of Engineering at the NTU Open House on 28 Feb 2026. In addition to showcasing how Mecatron enriches student life, our booth provided a space for the public to unleash their inner creativity; we had the privilege of engaging with a diverse public audience through our 3D pen activity and giveaway. Seeing participants of all ages enjoy the activity, and meeting future engineers ready for university, made the entire experience incredibly rewarding for our team.

Mecatron Booth @ Robo Fiesta Showcase + 3D-Printed Torpedo Assembly

Volunteers from Mecatron set up a booth at Robo Fiesta, a 2-day educational event (18-19 Apr 2026) held in Punggol Coast Mall, Singapore. Prepared for the general public, this initiative aimed to spark an interest in Engineering in young learners (up to lower secondary). To share about our team and our work, Mecatron displayed non-operational vehicles, the EduBoat for workshops and our publicity materials. We also guided interested participants to assemble & test a 3D-printed torpedo with toroidal propellers.

