RMIT BERSS MED-TECH HACKATHON 2025

Empowering Innovation Through Industry Collaboration

MEMKO is proud to have partnered with RMIT and Dassault Systèmes to support the 2025 BERSS Med-Tech Hackathon; an initiative led by BERSS President Toby Clarke that challenged students to design electronic prosthetic devices using industry-grade tools. Toby's reflection below highlights the creativity and collaboration of this hands-on event.

On July 16–17, the Biomedical Engineering RMIT Student Society (BERSS) hosted its annual Med-Tech Hackathon at RMIT's Advanced Manufacturing Precinct. Building on the success of our 2024 event, where students designed musical instruments for children with disabilities, this year's challenge invited participants to design an electronic prosthetic device to assist with mobility, sensory or functional needs.

The goal was clear: provide students with meaningful, hands-on experience in biomedical innovation. To achieve this, BERSS partnered with Dassault

Systèmes and MEMKO, who generously provided access to 3DEXPERIENCE CATIA, a leading industry software platform. Combined with electronics supplied by BERSS, students were empowered to bring their ideas to life.

The winning team developed 3D-printed smart glasses equipped with ultrasonic sensors and a buzzer that adjusts its frequency based on object proximity; an impressive feat of engineering within just two days.

As the organiser, I greatly appreciated the guidance and resources provided by our industry partners. Their mentorship and support helped shape the event's structure and ensured its success. Students gained practical skills in Arduino programming, 3D design, and additive manufacturing, all aligned with real-world industry applications.

This hackathon exemplifies the power of collaboration between academia and industry to inspire the next generation of biomedical engineers.

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