

ENGAGING THE COMMUNITY IN SCIENCE: A STUDENT-LED MODEL FOR INCLUSIVE STEM OUTREACH AND EXPERIENTIAL LEARNING

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Macquarie University's *Engaging the Community in Science* is a year-long subject that supports undergraduate students to co-design and deliver interactive and impactful Chemistry, Science and STEM outreach activities, including for Indigenous, rural, and regional school students, the public, and for fellow university students.

Engaging the Community in Science attracts students from across Macquarie University's Faculty of Science and Engineering as well as Humanities and Arts. This diverse student cohort, along with the hands-on workshop mode of teaching and year-long engagement, fosters a close, highly collaborative and interdisciplinary learning environment. Students also get to witness and reflect on the impact of their work on the school, university and community members they engage with, leading to their own building of pride.

Exemplars include *Engaging the Community in Science* students co-designing Indigenous themed activities alongside First Nations cultural educators, adapting customary Aboriginal medicinal plant and sustainable energy practicals for both university and school audiences, running chemistry magic shows for public events, and designing spectroscopy workshops for HSC chemistry students.

Engaging the Community in Science students gain valuable experiential learning opportunities that deepen their understanding of scientific concepts and their real-world applications, and they develop transferable skills such as communication, teamwork, project management, and problem-solving, skills that are highly valued across all career paths.

Ultimately, *Engaging the Community in Science* prepares Macquarie University students for careers in science education, communication, policy, and research, while also enriching academic staff through reciprocal learning, and providing impactful STEM education and community engagement.

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