


2024 Summer Research Project Description

UQ School of Architecture, Design and Planning

Project title:	3D printed structure for artificial reef
Hours of engagement & delivery mode	6 weeks onsite 20 – 36 hrs per week.
Description:	<p>This project develops highly customised structure prototype for development of artificial reefs with 3D-printed concrete parts with the support of industry partner. These modules can be rapidly constructed to create new marine habitats and be customised for different reef and marine habitat, increasing biomass of specific fish species, or new coral reefs.</p> <p>The 3D printed modules will be optimized for hydro dynamic informed form with customizable parameters accommodating different types of marine habitat.</p> <p>Students will be involved in design development physical prototyping, scanning and developing multimedia materials.</p>
Expected outcomes and deliverables:	<p>The students will gain multi-disciplinary skills ranging from structure analysis, digital design, optimization to advance fabrication such as concrete printing.</p> <p>The outcome of this research project may have the opportunity to exhibit in World Science Festival, Curiosity Brisbane exhibition 2023.</p> 
Suitable for:	Good hand on skills. Experience with Rhino and Grasshopper preferred. <i>Open to both architecture and civil engineering students</i>
Primary Supervisor:	Dr.Dan Luo d.luo@uq.edu.au

Further info:

Please contact supervisor before application