

Riverside Girls High School

Riverside is an inner city comprehensive girls school of 970 students with a well-established reputation for innovation in curriculum design and delivery. Faculty programs, enriched with STEM skills, have enhanced student engagement in cross-curricular projects with real world relevance. Extra-curricular opportunities with UTS:Hatchery, UNSW and the University of Wollongong are sparking much interest from students and parents keen to support their daughters in pursuing STEM careers. Collaborations continue to energise teaching practice and professional learning and drive the school's STEM plan and vision.



Riverside has been showcased nationally at the ACARA conference, regionally and in partnership with the University of Sydney's STEM Teacher Enrichment Academy and their Faculty of Education for pre-service trainees. The school has strong support from the parent community and links with industry. Riverside Girls is currently establishing the Stage 5 iSTEM elective and Stage 6 engineering studies.

At Riverside Girls, programs and teaching have strong cross-curricular collaborations. **STEM-enriched programs** have been developed within each faculty by integrating technology via coding, robotics, CAD, 3D printing & electronics in textiles; enhancing scientific literacy via argumentation, a Stage 5 simulated ecology unit based on Harvard University's *EcoMUVE* and the integration of electronics into our Stage 4 & 5 Science: *Physical World* along with challenge-based problem solving in mathematics.

In the **Stage 4 integrated cross-curricular STEM unit Post Earth Pioneers**, students 'explore' space, statistically analyse the necessities for life and design a space colony using Sketchup & 3D printing. This includes assessment milestones, peer and self-assessment and is showcased to parents.

The school developed cross-faculty project involving science, mathematics and PDHPE, **Stage 4 Frequency, Intensity, Time and Type (F.I.T.T.) principle**, allows students to work in collaborative teams to develop and test a personal fitness program to explore the F.I.T.T. principle through inquiry, scientific methodology and argumentation.

Riverside Girls has developed **flexible 21st century learning spaces** within existing structures by employing designs by student-led teams. The Robotics Lab, C21st Learning Hub and STEM Project Room accommodate cross-faculty and interdisciplinary projects within our STEM-designated timetable allocation.

