

HunterWiSE High School Intervention 2025

What is HunterWiSE?

HunterWiSE is an initiative to support the participation of women and girls in STEM in Newcastle and the Hunter region. The HunterWiSE Schools Outreach Program aims to positively impact perceptions of STEM careers amongst school-aged girls, thereby increasing overall participation in STEM.

What is the purpose of the high school outreach program?

The Schools Outreach Program offers female students in Year 8 the opportunity to explore STEM through project-based learning to solve local community issues. Completing the project will provide students with hands-on experience utilising STEM skills to solve real world problems. To assess whether we are meeting our aims we will invite participating students to complete surveys and interviews, before and after the project. Information regarding the research aspect of the intervention will be provided. You may choose to not participate in the research study, and individual students will be still able to participate in the program.

How long does the program go for?

The program will run for 10 weeks during Term 3, 2025. An orientation session is planned for Term 2 (date to be determined with each school). A presentation night will be held in Term 4.

What does the outreach program look like?

In Term 2, students will meet for an introductory session with the other participating students from their school, as well as any teachers who will be supporting the program. The HunterWiSE Mentors will lead these sessions. The 10-week program commences in Week 1 of Term 3 and comprises of weekly visits to the school by the HunterWiSE Mentors who will be responsible for the delivery of the program. Students will work in teams, with guidance from their mentor and teacher, to develop a STEM-based solution to a community issue.

Students will also spend a day at the University of Newcastle or an industry site. These visits will occur in Week 6 of Term 3 (date determined in consultation with each school). The final weeks will see the HunterWiSE Mentors help students polish the final project, design a poster with their findings, and finalise their prototype. The program culminates in a presentation night at the University of Newcastle in Term 4.

Can students of any gender participate in the program?

HunterWiSE initiatives are designed to address some barriers to participation in STEM that have been faced historically by girls and women. The Schools Outreach Program is tailored to promote the perception of STEM among female-identifying high school students. Students should be aware that gendered language such as she/her/female/girl/woman may be used in materials and communications.

How many students can participate?

A minimum of 8-10 students from each school are required. Ideally, we would like to see approximately 16 female students from each school participate. HunterWiSE will student numbers by Week 3 of Term 2. Students are asked to commit to attend all 10 weekly sessions.

What is the cost of the program?

The program is delivered at no cost to students or the school. Transport between school and the site visit locations will be provided free of charge.

What is the role of the school?

The school must provide adequate staff to support the implementation of the program in the school. The number of staff required is at the discretion of the school as some schools may have more students participating than others. The school must also provide access to computers for students, as well as space in which they can work (i.e. a classroom or library).

What is role of the supervising teacher/s?

The supervising teacher/s will be responsible for assisting the HunterWiSE Mentors with the delivery of weekly outreach program materials (provided by HunterWiSE) to students and providing guidance and motivation to the student teams. The supervising teacher/s will also be responsible for the supervision, safety and conduct of students during the site visit, and ensuring only HunterWiSE students attend.

What are the benefits for the students?

The students will develop practical STEM skills, as well gain insight into the careers that STEM study can afford. They will visit the University of Newcastle or an industry site, where they will engage in hands-on STEM activities, meet women working in STEM fields; all to showcase to them a variety of STEM pathways. Activities may include hands-on STEM activities, a Q&A session with women in STEM and tours of the site to see STEM in action. Students will present their projects to industry representatives, and compete against students in the region for prizes.

Does the program tie to the curriculum?

Great care has been taken to align the HunterWiSE high school intervention with skills outcomes from the K-10 science, and some skills and content outcomes from the mathematics curriculums. However, due to the flexible nature of the projects we cannot guarantee which outcomes will be addressed by specific team projects.

Who are the 'HunterWiSE Mentors'?

Our HunterWiSE Mentors are female students in STEM fields at the University of Newcastle. They have been carefully selected by HunterWiSE for their enthusiasm, passion, and experience. They all hold valid Working with Children Checks.

I have more questions, who do I contact?

Our Project Manager Leah Kiem is available to answer any questions you may have. Please email hunterwise@newcastle.edu.au or call (02) 4921 5085.