



Australian Government
Department of Defence

Women in STEM Decadal Plan Champion response



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Introduction

Defence is committed to building an inclusive organisation that leverages our diverse workforce to maximize our capability. As the demand for a technologically skilled workforce continues to increase, Defence is committed to partnering across government, academia and industry to shape Australia's STEM eco-system and build a diverse world-leading STEM talent pool for the future.

Our Defence STEM workforce is significant – in early 2019 approximately 34.5% of the Defence Australian Public Service (APS) and 50.6% of the permanent Australian Defence Force (ADF) workforce were in STEM roles. However, women continue to be underrepresented.

The Women in STEM Decadal Plan provides a unique whole of industry strategy to achieve real and sustained change for women in STEM in Australia. Defence supports and champions the plan and will continue to be guided by it in our approach to achieving gender equity in our STEM workforce.

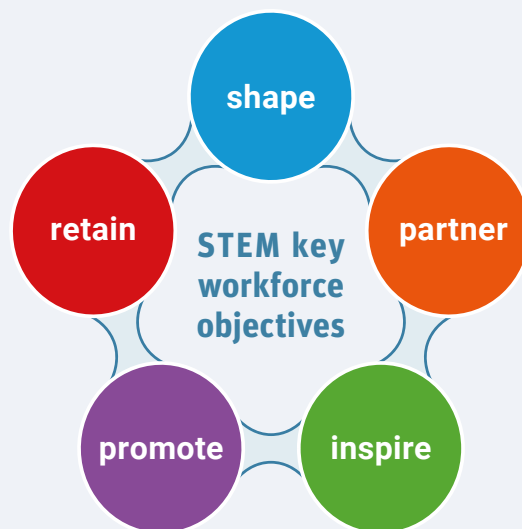


Leadership

Defence's future STEM workforce capability needs are a key priority for our leaders who recognise that we must take a lead role in driving gender equity in STEM in Australia. Through industry collaboration, Defence leaders have implemented a number of initiatives that support a cohesive and sustained approach.

Defence STEM Council

The Defence STEM Council was formed in 2018, bringing together Senior Executives from Defence and key stakeholders from across government to take a collective approach in progressing Defence's future STEM workforce capability needs. Increasing diversity is a key focus to ensure we access the best talent from all parts of the diverse Australian community.



MOVING TOWARDS A HIGH-TECH FUTURE FOR DEFENCE
Workforce Strategic Vision underpinned by
Science, Technology, Engineering and Mathematics
2019-2030

Defence STEM Workforce Vision

In 2019, the Defence STEM Council released our 10 year "Moving Towards a High-Tech Future for Defence" - Workforce Strategic Vision Underpinned by Science, Technology, Engineering and Mathematics. The Vision provides a cohesive framework to guide Defence and industry in attracting and maintaining a strong STEM workforce to deliver leading-edge short and long-term capability outcomes for Defence. The Vision harnesses the goals from the National STEM School Education Strategy 2016-2026, Women in STEM Decadal Plan, and the Defence Industry Skilling and STEM Strategy. Key focusses of the vision are to:

- Develop innovative pathways to enable women and Indigenous Australians greater access to STEM learning and employment opportunities, at all levels, which are embraced by government, academia, industry, and the education sector.
- Create an environment where girls, women and Indigenous Australians can thrive and progress.



Male Champions of Change (MCC)

As a member of MCC Founding Group and MCC STEM, Defence has a strong commitment to changing the representation of women at all levels in our workforce and industry. The Chief of Science Engagement and Impact Division is the implementation lead and the Chief Defence Scientist is a Special Advisor to the MCC STEM Group, which focuses on addressing the barriers of Women in STEM.

Key future activities



Collaborate with the Department of Industry, Innovation and Science to influence national STEM programs.



Collaborate with the Department of Education to influence the STEM School Curriculum to meet future Defence needs.



Provide an annual progress report against key actions and outcomes within the Defence STEM Workforce Strategic Vision.

Evaluation

A key priority of the Defence STEM Council is to ensure we maintain an evidence-based approach to addressing our STEM capability needs. Key activities aim to develop our understanding of the current state and identify existing frameworks and accreditations to support robust evaluation.



Maree Mahoney and David Kershaw (Chief, Science Engagement and Impact Division, Defence Science and Technology) with Defence's SAGE application.

SAGE Bronze Award

Defence (Defence Science and Technology) has recently submitted an application for the Science in Australian Gender Equity (SAGE) Bronze Athena SWAN Award. SAGE is a national evaluation and accreditation program that aims to promote gender equity in STEM across research and academia. The Bronze-level certification recognises that an institution has demonstrated a good understanding of the current status of gender equity, and is positioned well to implement interventions to address inequities. Extensive analysis was undertaken of our workforce data over several years to identify inequities and develop a comprehensive action plan to address them.

Key future activities



Evaluate accreditation programs that focus on setting goals and work to change issues that impact on women in STEM.



Establish a framework to monitor impact, performance and outcomes of Defence STEM programs.

Workplace culture

Central to our capability is our inclusive workplace culture, with workplaces that are equitable and inclusive where all people can contribute and reach their potential.

Through our employment policies and conditions we aim to provide a framework to support greater inclusion. This includes flexible work arrangements, acceptable behaviour policies, performance and development processes, reward and recognition opportunities and equitable recruitment practices. In line with the priorities under the Defence STEM Workforce Strategic Vision, we deliver a range of targeted initiatives to support women in STEM roles to build their careers.

The Future Through Collaboration mentoring

Defence has collaborated with Defence industry partners in a women's mentoring program called 'The Future Through Collaboration'. This Program is open to women working across engineering, project management, technical specialisations, Information Technology and cyber disciplines to support them to build their careers. To date, the program has provided 284 women working in Defence and Defence Industry with an opportunity for mentorship that may otherwise not have been available. The program was the winner of the 2017 Best Support Service Essington Lewis Award at the Defence and Industry Awards.



Parenting Outreach Program

The Australian Signals Directorate Parenting Senior Executive team run quarterly parenting outreach sessions for parents and other employees on long-term leave. These sessions allow employees, particularly those in technical and nice fields, to stay engaged with their teams, keep up to date on the latest workplace information and stay aware of current and future opportunities available to them.



International Women's Day

Defence recognises several events celebrating diversity and inclusion including International Women's Day. In 2020, International Women's Day is one of six key events recognised as a Defence Event of Significance.

Photo: Carmel McGregor, Deputy Secretary Defence People, and Air Marshall Mark Binskin Vice Chief of the Defence Force with a group of women featured on the Women of Influence Display, as part of an International Womens day event held at Defence Headquarters in Canberra.

Key future activities



Ensure talent pipeline programs are in place to transition STEM students into Defence careers.



Create cross-sector mobility options to advance STEM career development.



Undertake a longitudinal study of ADF and APS STEM personnel to identify key attributes of a career in Defence.

Visibility

A key focus for Defence under the Defence STEM Workforce Strategic Vision is to inspire students to seek STEM careers. Central to this is building visibility of women in STEM in Defence and across the industry.

Jasper

As part of its strategy to engage more girls and women in STEM-based subjects and career paths, the Air Force has launched a new initiative based around a character named Jasper.

Jasper is a cutting edge animation created in a partnership between Defence and University of Technology Sydney. Jasper's character is based on Squadron Leader Jacqueline Killian, who voices the grown-up Jasper in the animation.

Jasper was made to spark interest in aviation and developed using both traditional techniques and new technologies such as robotics and 3D printing. The film was recently awarded Gold at the prestigious 2018 Animation Effect Awards and Festival.



Key future activities



Promote the variety of STEM careers in Defence by sharing stories of success via media platforms, awards, and internal and external role models.



Defence STEM Council Members will sign up to the Male Champions for Change Panel Pledge to support visibility of women in all forums.



Link base and site Defence members with the Department of Education to represent STEM roles at schools with a focus on late primary and early secondary.

Education

Defence supports and delivers a range of initiatives aimed at inspiring, attracting and supporting girls and women to pursue careers in Defence STEM. Activities are aimed at girls at all stages of their education, from outreach events, camps and competitions to work experience, scholarships and cadetships.

Defence STEM Cadetship Program

The Defence STEM Cadetship Program is designed to build Defence capabilities in high priority areas such as cyber, engineering, sciences, surveillance, space, naval architecture and autonomous systems.

The program recruits students in their final years of study, paying them a salary and engaging them through an industry placement in Defence while they study.

On completion of their program, the students have a permanent STEM position within Defence. This program supports the talent pipeline, increases students in certain disciplines and promotes engagement of female STEM students from undergraduate studies into a career.



Girls Programming Network

Australian Signals Directorate lead the Canberra chapter of the Girls Programming Network, which is a free quarterly coding workshop for up to 100 girls aged between 11 and 17. It is coordinated and run by female volunteers within Defence, other technical organisations and tertiary students. The workshops are suitable for all abilities and include coding training, mentoring and the opportunity to demonstrate new skills to parents and carers at the end of the day.

Flight and Technical Work Experience Programs

Air Force runs two Experiential Camps for young women; Flight and Technical Work Experience Programs. The camps run over several days and provide young women aged 16-24 with an opportunity to explore the exciting aviation, engineering and technical trade careers available within the Air Force.

As well as being exposed to military aviation operations, participants also experience the day to day routine of an Air Force base, and have several opportunities to engage with Air Force personnel and Defence Force Recruiting specialists. 100% of participants said that they intend to pursue Defence careers in the future.



Key future activities



Establish a STEM Outreach and engagement Framework with key objectives for the whole of Defence, including activities that strive to encourage and increase diversity in STEM.



Partner with Department of Education to develop STEM teachers through the provision of course materials, real world case studies, teacher sabbaticals, and student work experience.



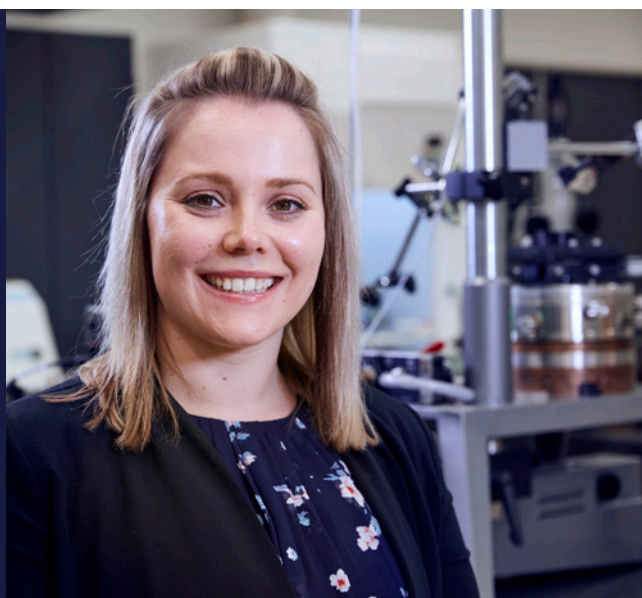
Create products for use in the education sector to raise awareness of careers in STEM, including products targeting girls in STEM.

Industry action

The modernisation of Australia's defence capability relies on diverse STEM skilled workforces both in Defence and Defence Industry. Under the Defence Industry Skilling and STEM Strategy, we aim to provide a cohesive approach to support defence industry workforce skills needs through enhanced government, industry and education and training sector collaboration.

Defence Industry Skilling and STEM Strategy

The Defence Industry Skilling and STEM Strategy was launched on 28 February 2019. The Strategy details how the Government will help the Australian defence industry to meet their workforce skills requirements over the coming decades. It is a key part of the Government's long-term vision to build and develop a robust, resilient and internationally competitive Australian defence industrial base that is able to meet defence capability requirements. The Strategy focusses on four key areas: Engage; Attract; Train and Retain; and Collaborate – a key objective is to improve diversity in defence industry.



Key future activities



Launch a new defence industry skills grant to support defence industry to train and retain their staff and improve HR practices within defence industry businesses.



Enable enhanced collaboration with Defence industry, the education sector and government stakeholders to grow Australia's defence industry workforce and maximise opportunities from separate investments.



Collaborate with Defence industry and academia to provide advice to Government of STEM policy.



Ensure Defence is represented on key STEM professional bodies and associations that have a national presence.





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