



**2019 Mission Based Compact
Between the Commonwealth of Australia and Murdoch University**

PURPOSE

This compact is an agreement between the Commonwealth and the University. Entering into a compact is one of the quality and accountability requirements, which a higher education provider must meet under the *Higher Education Support Act 2003 (HESA)* as a condition of receiving a grant. Specifically, subsection 19-110(1) of HESA requires that Table A and Table B providers must, in respect of each year for which a grant is paid to the provider under HESA, enter into a mission-based compact with the Commonwealth for a period that includes that year.

All strategies should provide qualitative and/or quantitative measures of assessment.

MISSION

Primary Focus

The Murdoch University *Strategic Plan and Future Horizon 2017-2027* guides and informs the future direction and focus of the University.

The University's primary focus is expressed through the Plan's Purpose:

To be a creative force for current and future generations.

As a university we will be of service to our communities and shape the world through Murdoch's determination to apply our knowledge.

Values and Aspirations

Murdoch University's founding principles are: Equity and social justice, Opportunity, Sustainability, and Global responsibility. This is expressed in the Strategic Plan through a culture that advocates Integrity, Respect and Diversity, Purpose, and Excellence and Future-focus.

The Strategic Plan is built on a matrix of:

- **Core Goals:** Students and Education - Provide every student with an outstanding education experience, leading our graduates to become innovators fully prepared for their future careers; and
Research and Innovation - Provide life changing solutions to complex world challenges.
- **Lenses:** Service to society; Collaborative partnerships; and Global outlook.
- **Pillars:** People, values and culture; Financial strength; Physical and digital environments; and Value-add services and operations.

Further information: Five year progress goals and our Ten year horizon are detailed in the Strategic Plan and Future Horizon 2017-2027: <https://www.murdoch.edu.au/about-us/our-strategy>.

The University is making strategic capital investments in teaching spaces and enabling technologies for research and innovation. This is aligned to the development of Murdoch's Knowledge and Health Precinct, and active engagement in the Indo-Asia-Pacific region that strengthens opportunities for research and engagement and underpins international student growth.

Further Information: Campus Masterplan, incorporating the Knowledge and Health Precinct: <https://www.murdoch.edu.au/life-at-murdoch/perth-campus/our-changing-campus/master-plan>

A new two College structure was implemented in 2019 with the aim to support innovative multidisciplinary approaches to research and teaching and operational effectiveness. This has included the appointment of new College leadership teams. The creation of the new academic

structure, and realignment of professional services, was undertaken in consultation with staff across the University using a co-design and co-creation approach.

The two Colleges are:

- The College of Arts, Business, Law and Social Sciences (ABLSS); and
- The College of Science, Health, Engineering and Education (SHEE)

Building on the structure of the academy, College professional services are structured to provide more collaborative and effective support to the Colleges, utilising central services to facilitate administrative productivity.

Senate monitors the delivery of the strategy through key milestones and KPIs.

Model Code on free speech and academic freedom

Murdoch University has commissioned an independent review by an expert specialising in higher education governance matters of its existing policies, procedures and practices against the principles and guidelines contained in the Model Code and in the context of national and international best practice.

The outcome of the review will be considered at the December 2019 Senate meeting and will ensure the University is positioned to meet the requirement to advise the Minister of Education of the mechanisms through which Murdoch will reflect the Model Code in its policies and practices from 2020.

TEACHING AND LEARNING

Murdoch University has strategies in place to grow undergraduate student load, both domestically and for onshore and offshore international students. Diversification of the student population strengthens financial resilience which enables the University to be more agile and, in turn, to promote increased student satisfaction, progression, completion and employability.

Murdoch's strategic outcomes for 2018 to 2023 are:

- **Innovative Curriculum:** Curriculum design that offers all students the opportunity to learn both disciplinary knowledge and transferrable skills, and that incorporates a 'career learning spine' into all undergraduate courses. In partnership with students, employers and professional bodies, new courses will be developed that resonate with future career opportunities.
- **Inclusive education and student support:** Students will be supported to transition into higher education study and to succeed whatever their starting point. Enabling pathways will be strengthened through collaboration and partnerships thus providing opportunities for more people in our communities. The Kulbari Aboriginal Centre will provide support for Aboriginal and Torres Strait Islander students as well as positive, vibrant and transformative space for ATSI students and the broader community.
- **Academic leadership:** Continue to develop staff to be first rate educators, building on research and professional experience to inform our teaching.
- **Digital experience:** Extend our reach by offering high quality, flagship courses and units for students who study online or in a combination of campus-based and online study. Partner with a global online learning platform to enable more students to benefit from Murdoch's teaching and research excellence.
- **Students as change agents:** Provide opportunities and support for our students to lead on learning and teaching innovations that will contribute to their success.

Ongoing review of academic programs will ensure a financially sustainable, contemporary portfolio of courses, including new and unique offerings developed to meet changing workforce demands (initially focussing on allied health opportunities).

The University monitors and refreshes curriculum design, assessment, pedagogy and delivery methods to ensure they support the varied learning needs of students. Murdoch's unique Career

Learning Spine provides practical, transferable skills that support students' career aspirations and employability and is a requirement in all undergraduate courses, ensuring that employability is central to all new offerings.

Our partnerships with Navitas Limited in Dubai, and Kaplan Higher Education in Singapore and Myanmar support growth in transnational enrolments to meet the needs in these fast growing, dynamic regions.

Further information: Transnational Education: <http://www.murdoch.edu.au/TNE/>

Murdoch is working with major online learning providers to expand digital delivery of courses, up to full degrees. Murdoch is exploring and implementing opportunities for licensing/development of courses and course material aligned to career upskilling and life-long learning, including micro-credentialing.

Further information: Online Study: <https://www.murdoch.edu.au/study/study-online>

Murdoch utilises a continuous improvement program through the Think Enhancement @ Murdoch Program (TE@M) that aims to exceed the Higher Education Standards. TE@M undertakes course reviews to assure the academic quality of Murdoch's programs, and preparation for the University's reaccreditation by TEQSA scheduled for 2020.

Further information: Academic Quality, Curriculum Management and Policy: <http://www.murdoch.edu.au/Curriculum-and-Academic-Policy/>

Institutional key performance indicators overseen by Senate include:

- Student enrolments and load;
- Course satisfaction and satisfaction with overall experience;
- Good teaching measures; and
- Graduate outcomes.

University Admissions Transparency

Murdoch University provides a range of admissions pathways for different student cohorts. These are provided in the Murdoch University Admission Information booklet which provides details of the specific cohort requirements for eligibility for entry. In line with admissions transparency requirements, the booklet utilises common terminology and data definitions and provides data on applicant groups and ATAR thresholds including the student profile of the Semester One 2019 cohort.

Further information: Admissions pathways: <https://www.murdoch.edu.au/study/undergraduate-students/admissions-pathways>

The Colleges employ a mixture of approaches to determine what support is required to assist students to succeed in their studies. This includes our new MyMurdoch Advice hubs located around the campus. Course coordinators also identify applicants that may need to start on a part time basis in the first semester to ensure the student transitions successfully into university study.

As indicated in the Equity section below, Murdoch University offers enabling programs targeted towards specific student cohorts, including ATSI students, students who have recently completed secondary school but do not meet admission pathway entry requirements, or students who completed their secondary schooling more than two years previously.

Student Retention

It is recognised that students who are engaged with their course, campus and peers are typically more successful in their studies and are therefore more likely to be retained at University. Murdoch aims to provide 'success strategies' that initially engage with students and then support them to make the most of their teaching and learning opportunities, as well as campus life and the real-world opportunities provided as part of their studies, as detailed below.

Promote access to Murdoch University, focusing on equity and diversity:

- Further develop (digital) pre-departure information that prepares students for University studies and life in Perth.

- Increase online (external) student engagement by providing tailored communications and interaction opportunities with peers, teaching and support staff.
- Enhance and celebrate the experiences of students enrolled via Alternate Entry Pathways.
- Learning experiences that foster a respect and appreciation for Aboriginal and Torres Strait Islander people, history and knowledge.

Deliver an engaging “O Week” each semester that helps students connect to their course, the campus and their peers:

- Orientation activities are inclusive of all campuses, cohorts and study modes.
- Orientation programs run across first five weeks of each semester, providing transition support.

Ensure accessibility and sustainability of student support services.

- Utilise tiered learning support model:
Ensure the sustainability of MyMurdoch Advice (MMA) tiered services that provide co-located academic skills and pastoral care advice. Students can walk-in, phone, email or make an appointment to discuss any issue impacting student wellbeing and academic progress. Students may be referred to other support services depending on need and complexity.
- This new provision has supported over 10,400 students face to face and an additional 7,900 students virtually.
- Focus on ‘advice seeking’ behaviour translating to resilience, success and completion.
- Create integrated customer service teams that have fundamental student lifecycle events as the key decision-making points:
Resolve as many issues as possible for the student at first point of contact (86%), wherever that might be in the University. Provide excellent customer service that makes students feel valued and encourages a self-help approach.

Monitor and review student progression to maintain progress and success.

- Focus on first year as the foundation to future success.
- Develop real-time retention data analytics reports to inform student attrition
- Intervene early with appropriate support, within the curriculum context: Maintain ‘at-risk’ student reporting methods for Academic Staff to identify and immediately report students deemed ‘at risk’ (for reasons including poor attendance, poor results, presenting with poor mental health etc) for follow up by relevant support services.
- Maintain the personalised ‘right message, right time’ student communication approach. This includes personalised messages re orientation, interventions to discuss academic progress, re-enrolment support, international student compliance notifications and campus events.
- Prioritise complex student cases and international student compliance cases. Student Engagement Team provides interviews for students on mandatory progress interventions and those under the age of 18. Case manage students with intersectional issues requiring support from multiple services that may include learning support / social work support / medical/ counselling / disability etc.
- Recognise the achievements of students who have improved performance over time – “rewarding resilience”

Offer enriching ‘campus life’ opportunities:

- Increase the individual social capital of students through Peer Mentor programs, leadership opportunities and inclusive campus events.
- Develop and promote opportunities for students to volunteer and gain employability, leadership and graduate skills whilst studying at Murdoch.
- Encourage and support projects that provide opportunities to engage with students through the Students as Partners and Students as Change Agents in Learning and Teaching SCALT programs.
- Increase on-campus student engagement events

Measures of success include: UniReadiness Survey outcomes (internal survey for new students); QILT measures of Student Satisfaction and Graduate Outcomes; and success and retention rates.

RESEARCH AND RESEARCH TRAINING AND INNOVATION

Murdoch University's Research and Innovation Plan 2018-2023 builds on current research strengths and immediate opportunities. Research activities at Murdoch are shaped toward consolidation and critical mass in key research areas to make a contribution at the local, national and global level. Our research is translational in nature and substance, with inspiration coming from our local community and industry-based partnerships, as well as from national and international collaborators with whom we tackle some of the major challenges of our time. The research strategy seeks to deliver an annual increase in research quality, research and income and PhD student completions.

Research is focused across three inter-related core interdisciplinary themes – food security, health futures and sustainable development. We have established three interdisciplinary research institutes aligning with these core research themes.

Research and research active staff are organised around three research institutes:

- Health Futures Institute;
- The Harry Butler Institute for Sustainable Development; and
- Food Futures Institute.

The Institutes ensure that strong partnerships are built, and critical mass developed to strengthen research reputation and profile, with areas of multi-disciplinary focus brought together into Centres within the Institutes. The institutes provide a strong platform for increasing the number and scope of our strategic research partnerships with local, national and international industry partners and universities and research institutes.

A major area of focus is the Australian National Phenome Centre, within the Health Futures Institute, that will accelerate better health outcomes and health care for Australian people, by building a world-class platform for transforming how we prevent, identify and treat disease; which will also be a platform for study and translation to address other significant health-related global challenges, including in relation to agriculture and food; linked to a global network of phenome centres.

The Health Futures Institute also includes other health-related research Centres, including the Ngangk Yira Research Centre for Aboriginal Health and Social Equity, immunology and infectious disease, and neurological and translational science.

The Harry Butler Institute for Sustainable Development will enhance environmentally-focussed teaching and research, including in biodiversity, biosecurity, bioeconomics, sustainable aquatic systems and water, waste and energy.

The Food Futures Institute will establish a platform for enhancing the University's research strength in primary food production, including grains, meat, fish and agricultural biotechnologies.

A whole-of-University approach to innovation is being implemented. This includes effective support for development and registration of intellectual property; an internal innovation fund; a creative innovation space, 'Launchpad'; and student engagement (industry mentors, WIL).

Through the PVCs of the Research Institutes and the College Deans and Research & Innovation, we support and promote collaboration and innovative multidisciplinary approaches to research. Through Research & Innovation and the Colleges, a number of support workshops and programs are available to researchers to enhance research quality and increase success in securing research funding and developing research partnerships.

Research Training

A rigorous admission process ensures that all PhD candidates can work with supervisors who are leading-edge researchers in their field of study. The Graduate Research Office (GRO) provides training

workshops for both students and supervisors to facilitate successful and timely completions. In addition, the GRO facilitates a program of professional skills training for HDR candidates.

Further information: HDR Student Support Resources: <http://our.murdoch.edu.au/Research-and-Innovation/Resources-for-current-students/Orientation-resources-and-support-for-research-students/>

PhD candidates are encouraged to undertake industry-based placements and internships, both organised in-house and through the [WA iPrep system](#) and [the APR.Intern program](#). Expansion of industry-based PhD projects, internships and supervision is a high priority for the University as it grows the PhD student load, including international students.

Research translation and commercialisation

The University has an [Innovation and Entrepreneurship Strategy 2018-2023](#). Key steps Murdoch University will take to generate interest in innovation and improve the translational pipeline from invention to implementation will include:

1. Creation of visible and accessible expert teams to support industry and academic interactions
2. The development of systems and frameworks that maximize awareness of our capabilities and inventions and matches these to external needs and opportunities
3. An ongoing program of education, including training, to foster entrepreneurial mindsets for emerging staff and students
4. Creation of a co-learning innovation hubs that are well connected to similar hubs locally, nationally and internationally
5. On-going review of staff KPIs to encourage engagement with the national innovation agenda

In addition, Murdoch partners with CERI (Centre for Entrepreneurial Research and Innovation) to provide support to researchers and provides addition in-house training in regard to innovation, entrepreneurship and Intellectual Property issues. The Commercialisation Team within research & Innovation provide support and advice to researchers (including research students) who are looking to commercialisation and/or patent their research.

Open access

The University has the MU research repository through which research publications, including student theses, are made publicly available. The University is currently revising its Research Data Management Policy and associated procedures and materials to ensure compliance with the Australian Code for the Responsible Conduct of Research (2018), requirements of funding agencies and other relevant requirements.

EQUITY

Murdoch's student population includes proportionally higher cohorts than sector averages of Low Socioeconomic Status (SES) students, students with a disability, Indigenous students, students from a Non English speaking background, first in family students, students who have delayed enrolment and students aged over 25.

Aboriginal and Torres Strait Islander outcomes

The Kulbardi Aboriginal Centre, guided by the ATSI Education and Strategy Committee, manages strategies to improve performance in key indicators of Aboriginal educational outcomes including access, participation, retention, completion and success. The Centre also provides student support, academic coaching, study space and learning technologies to support student success. It also coordinates Indigenous tutorial assistance and learner support across all levels of study.

Further information: Aboriginal and Torres Strait Islander Student and Education Strategy 2019-2022: https://www.murdoch.edu.au/docs/default-source/life-@-murdoch/kulbardi-aboriginal-centre/atsi-student-and-education-strategy.pdf?sfvrsn=1e9ec140_8

Programs to inspire ATSI students to consider not only university but other ATAR or non-ATAR learning pathways that are available after high school include connecting with students through high

school engagement, Deadly Dreaming, Djilba and community outreach events. A range of incursion workshops designed for ATSI secondary students from Years 7 to 12 are offered. These inspire critical thinking, leadership and aspiration to encourage students to think about what happens after high school and empower students with the information needed to make decisions about their future.

K-Track is an award winning, 14-week enabling course designed to provide a pathway ATSI students to qualify for entry into an undergraduate degree. The course is tailored specifically for ATSI students who would not otherwise qualify for entry.

Further information: K-Track Enabling Course: <http://www.murdoch.edu.au/Kulbardi/K-Track-Enabling-Course/>

A focus on recruitment and retention of ATSI students has seen steady growth in ATSI enrolments to achieve a level of 2% of the domestic enrolled cohort, while also increasing ATSI retention rates to equal the whole of University average.

The Reconciliation Action Plan outlines how Murdoch University works towards equity for ATSI people in the areas of Governance, Learning and Teaching, Research, External Engagement and Human Resources. The next iteration of the Plan is being finalized for submission to Reconciliation Australia for endorsement. An important component of the revised Plan has been the appointment of a Pro Vice Chancellor Aboriginal & Torres Strait Islander Leadership.

Further information: Reconciliation Action Plan: <http://qoto.murdoch.edu.au/RAP>

Further information: Kulbardi Aboriginal Centre: <http://www.murdoch.edu.au/Kulbardi/>

Outcomes for students from Regional and Remote areas and students from Low Socioeconomic backgrounds, including reducing youth unemployment

'OnTrack' enabling program is an on-campus, pre-university course designed to assist people from disadvantaged or disrupted educational backgrounds to enable their entry to university. Murdoch consistently over-enrol this program to meet demand and to support disadvantaged students. This over allocation demonstrates underlying structural problems in the preparedness of students for university.

The University is committed to increase student participation where the profile and diversity of student applicants is from non-traditional ATAR routes. We are working in collaboration with TAFE to ensure opportunities are available to continue onto degree level studies and qualifications.

Murdoch includes a number of high volume Low SES schools into its engagement priority list, with a view to growing the number of students from these schools choosing university study. This extends to specific schools and programs, for example the University is currently working with Pinjarra Senior High School to develop a bid for a Regional Economic Development Grant to support and work with the school to connect the students with agriculture as a career objective. There may be potential in developing a program that connects students to the agricultural industry via related sciences, which in turn could potentially support the 'Transform Peel' project, specifically linking to development of the Peel Food Zone. A similar undertaking is being developed with John Tonkin College, but across marine and tourism themes.

Further information: Access Pathways (OnTrack, OnTrack Sprint and FlexiTrack): <http://www.murdoch.edu.au/OnTrack/>

Further information: Undergraduate Scholarships: <http://our.murdoch.edu.au/Student-life/Finances/Browse-scholarships/Undergraduate/>

Student support

Given our cohort mix, Murdoch is focussed on students developing 'cultural capital' through academic support, pastoral care and financial assistance (guided by learning analytics) to support students' successful transition to university study.

The allocation and funding of scholarships for domestic undergraduate students enables the targeting of financial support to promote increased participation and retention from these student cohorts.

As part of a broader restructure in 2019, Murdoch University created the Access, Wellbeing & Equity (AW&E) portfolio, bringing together a range of support services in order to promote access and enhance the focus on inclusion and wellbeing. Alongside provision of direct services to students the AW&E area is also responsible for implementation of key strategies and action plans -

- Student Wellbeing Strategy that takes an inclusive approach to wellbeing both on campus and in curriculum
- Respect Now Always Action Plan to promote respectful relationships and minimise sexual harassment and sexual assault within the Murdoch Community
- SAGE Athena SWAN Action Plan to improve gender equity across Murdoch, which has included the resourcing of parenting spaces on campus to support students with young children to remain engaged with study, with future plans to develop a crèche on campus.

AW&E has created a University Social Worker position that commenced in May 2019 to provide additional welfare advice and support primarily targeting students from Low SES backgrounds and/or with complex and multiple presenting needs to assist these students to remain engaged in their studies.

Murdoch's Disability Access & Inclusion Plan (DAIP) is maintained and in 2019 the University has invested in addressing a number of accessibility issues to make the campus more accessible to students, staff and community. These actions have been implemented following consultation with students with disabilities and staff with specialism within the field.

Further information: Support Services: <http://our.murdoch.edu.au/Student-life/My-First-Year/Support-Services/>

Further information: Support for Learning: <http://our.murdoch.edu.au/Student-life/Study-successfully/>

In November 2017, Murdoch University joined the Science in Australia Gender Equity (SAGE) pilot of the Athena SWAN accreditation program which aims to improve gender equity in STEMM in the higher education and research sector. Self-assessment for our application for SAGE Athena SWAN accreditation has been submitted using data obtained from an institutional Diversity and Inclusion survey, broad staff feedback and quantitative data. Implemented programs supporting gender equity and diversity goals include mentoring and networking opportunities, training and awareness around bullying and discrimination, and introduction of the *Entry to the C-Suite*® program.

Further information: SAGE Athena SWAN: <http://our.murdoch.edu.au/Human-Resources/Equity-and-Social-Justice/SAGE-Athena-SWAN/>

Community access to facilities

The University is committed to engaging with the wider community by continuing to offer open access lectures, events and opportunities to engage on campus. Our new facilities in the CBD, along with the introduction of a new academic building on our South St Campus, will enhance the University's external engagement activities.

Murdoch's Disability Access & Inclusion Plan (DAIP) is maintained and in 2019 the University has invested in addressing a number of accessibility issues to make the campus more accessible to students, staff and community. These actions have been implemented following consultation with students with disabilities and staff with specialism within the field. Increased accessibility of the University's facilities encourages broader community use of the Universities facilities.

LABOUR MARKET OUTCOMES

As part of the University's new academic structure, Deans of Engagement have been appointed to each of the Colleges with the aim to build and enhance the University's external networks, especially business and industry. The focus of the Deans of Engagement will be to ensure the University has well developed links with the external community to inform our internal operations such as course

development, identifying skills gaps, identifying opportunities to address employability, and providing additional practical and on-the-job learning opportunities for our students.

Murdoch is a member of the Australian Association of Graduate Employers and staff of the Careers and Employability team regularly meet and discuss graduate employment and labour market trends with local members. Information from this group is shared with discipline areas as well as informing career activities developed by Careers and Employability.

The Careers and Employability support team have an active industry engagement program and work with industry to represent careers to students in targeted disciplines. Industry representatives act as guest speakers, mentors, presenters and exhibitors at career fairs and other professional events.

Murdoch University is currently developing an employability strategy led by the Pro Vice Chancellor (Education) and the Careers and Employability team. This effort has involved consultation with industry, students and academic staff to ascertain the skills required by industry and how university academic units are assisting students to prepare to meet the needs of the future labour market.

The strategy will involve a university-wide approach to employability, ensuring that not only all students have an active engagement in their own development, but that academic staff are supported with tools to help embed employability through curriculum. Students will have the opportunity to experience real world work opportunities, both in curriculum and in co-curricular offerings. Three career development units (Murdoch Careers Spine) are already required for all Murdoch students in non-professional degrees and assist student to identify career direction and explore opportunities for work-related experiences as well as upskilling with micro-credentialled online courses.

General and discipline customised career development and job search programs are coordinated by the Careers and Employability team. This team also works closely with academic programs to assist in delivering career and labour market information in teaching.

The University has identified the need for developing co-designed, co-created and co-delivered education programmes. This has been translated into a set of strategic imperatives that inform our 2020 Operational Plan. Success in this will be achieved by working closely with Business, Industry and Government in areas identified as priority. Strategic priorities include:

- Partner with Industry to increase work-readiness and Grow Work integrated Learning opportunities and thereby enhance Student employability, collaborate with strategic partners, enhance our student experience and increase student placement opportunities.
- Expand and Engage Strategically in the Southern Corridor of Perth. This includes initiatives such as Learning@Location, sub-bachelor programs (Rockingham), as well as Agri-Business courses for the Peel Region, designed in collaboration with Peel Regional Development Commission (PRDC).

Murdoch University has worked with the Department of Training and Workforce Development (DTWD) and PRDC in the Peel region, in particular participating in the preparation of the 2019 Peel Labour Market Review that supports the State Priority Occupation List. The aim of the Review and SPOL is to be responsive to the employment needs of the regions and ensure that training aligns with future jobs growth in the regions.

Labour market outcomes for graduates are monitored by the Colleges and Senate through the Graduate Outcomes Survey and Graduate Outcomes Survey – Longitudinal.

SECURITY MEASURES

As a higher education community member, Murdoch University actively participates in CAUDIT and as a result partner with AusCERT and AARNet, in an initiative known as the Australasian Higher Education Cyber Security Service (AHECS). This initiative provides member universities with services and advice to safeguard our intellectual property and reputation as well as recognise and counter an

ever evolving threat landscape. The AHECS framework provides existing and proposed services across four key focus areas; engagement, advocacy, advisory and support and operations.

Murdoch participates in the CyberSecurity community of practice, also supported by CAUDIT. This allows members to share information in a confidential and trusted environment.

On an individual level Murdoch University implements several key elements to safeguard against cyber-attack. The University:

- employs a risk based approach to determining where to prioritize and place process and technical controls;
- has a developed centralized policy framework and report compliance metrics to leaders on a regular basis;
- employs security classification to determine the appropriate level of controls to be placed on our assets;
- executes regular security assessments on our environment to determine the effectiveness of our process and technical controls; and
- employs a number of security technologies to protect our environment and are looking to mature these controls in accordance with advice provided by the Australian Signals Directorate (ASD) essential 8.

Information Technology security was the focus of a 2019 internal audit, monitored by the Audit and Risk Committee of the University Senate. As part of this audit, penetration testing of external internet facing infrastructure was included and undertaken. The outcomes of this audit have been considered in developing policies and practices for IT security.

As an active participant of the CAUDIT community, Murdoch is able to access services provided by AHECS including best practise guides, strategies for mitigation and templates. Through AHECS, a talent pool is available post-breach to assist in immediate response and longer-term mitigation strategies. In the case of a serious breach, Murdoch partner with an external commercial organisation that can provide investigative and mitigation support.

On an individual level Murdoch implements a range of process and technical controls to manage a detected security breach including:

- A dedicated cyber security team;
- Documented response procedures;
- Documented recovery procedures and recovery technologies; and
- Technology solutions that assist in the investigation, prioritization and immediate response to a security breach.

Murdoch has a number of proactive controls to avoid the risk of a security breach including:

- Regular server and workstation patching;
- User privilege restrictions and regular review;
- Internal and externally led security assessments including ongoing vulnerability management;
- Security technologies such as firewalls and intrusion prevention systems;
- Centralized monitoring; and
- Access controls including the tactical use of Multi-Factor Authentication.

In addition, a Data Breach Response Plan for Information Technology systems and data is in place.

The Murdoch Cyber Security Strategy leverages key elements of ISO International standards and Australian Signals Directorate (ASD) mitigation frameworks.

In the ASDs 'Strategies to Mitigate Cyber Security Incidents – Mitigation Details' advice the document provides 37 mitigation strategies including what the ASD term as the "Essential 8". Murdoch actively pursue continuous maturity improvement in the Essential 8 through an information security program of work.

Our progress on this program of work is tracked and reported to the University's Audit and Risk Committee on a quarterly basis.

Foreign interference

Murdoch University has processes in place to identify foreign interference activities. These include cybersecurity measures, close scrutiny of all research grants and HDR applications to identify potential for critical intellectual property or defence control implications.

The University actively participates in the work of the Foreign Interference Taskforce set up by the Minister for Education and will look to implement recommendations arising from that work to enhance the University's activities and processes as appropriate.

SIGNED for and on behalf of

In the presence of:

THE COMMONWEALTH OF AUSTRALIA

by

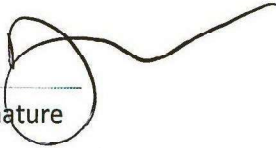
DOM SWELLSIT

Full name (please print)

GROUP MANAGER

Position

of the Department of Education as delegate of
the Minister for Education.


Signature

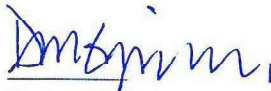
23/12/19
Date

Drew Menzies-McWay

Witness (please print)

Branch Manager

Position or profession of witness (please print)



Signature

SIGNED for and on behalf of

In the presence of:

UNIVERSITY

Professor Eeva Leinonen

Full name (please print)

VICE CHANCELLOR

Position



Signature

GEMMA COMINELLI

Witness (please print)

EXECUTIVE OFFICER

Position or profession of witness (please print)



Signature