

# 2020 Mission Based Compact Between the Commonwealth of Australia and the University of Wollongong

#### **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

Over the Compact period, the University of Wollongong (UOW) will:

- Continue the drive to build an outstanding research environment, a strong graduate school and clear incentives to drive research focus and productivity;
- Continue the transformation of our curriculum linked to student demand, graduate outcomes and use of new technology;
- Invest in our people to collaborate internally and externally to achieve great things;
- Enhance our campuses, and align our facilities to the changes in centres of population and emerging research priorities; Leverage our reputation as a global multi-campus university by growing our off-shore international program and portfolio;
- Work with our partners to create greater levels of innovation and impact, and contribute to the creation of new enterprises;
- Engage with our alumni to build a network for life;
- Maintain an efficient and productive university focussed on adaptability and financial sustainability;
- Aspire to make UOW a destination university and Wollongong a university city.

UOW's current key strategies are outlined in the UOW 2016-2020 Strategic Plan: <a href="https://www.uow.edu.au/about/our-vision-strategy/strategic-plan/">https://www.uow.edu.au/about/our-vision-strategy/strategic-plan/</a>

The draft UOW 2020 – 2025 Strategic Plan has been developed and feedback and input is currently being sought from our students, staff, alumni, industry partners and community. The draft Plan commits the University to continue to lead positive change for our communities. The Plan is due to be formally launched in February 2020.

UOW is deeply committed to the principles of academic freedom and free speech. These are important matters for the university that must be carefully and thoroughly considered in light of our current policies, guidelines and agreements. As such, the University community has been strongly encouraged to engage with the issues raised in the French Review, participate in consultation sessions and send in submissions.

The University community's level of engagement will determine how UOW should best implement the recommendations of the French Report. Sector benchmarking, through established university networks, will also be undertaken to ascertain how other universities are responding to the recommendations of the French Review, including whether the Model Code is being adopted in full or in part by other institutions. Best practice examples will be sought.

UOW's response is expected to be finalised in early 2020, subject to the level of engagement by the University community and resourcing.

#### TEACHING AND LEARNING

UOW delivers student-centred, intellectually challenging programs to the highest standard, in technology-rich and immersive teaching environments that prepare students for their roles in society and the global workplace.

#### UOW continues to:

- Transform what and how we teach and how we assess learning to maximise student success and
  positive personal and employment outcomes whilst promoting curiosity, agility and mutual
  respect.
- Modernise our academic course offer ensuring it is attractive, efficient and that every student has real world, inquiry—led, technology—enriched, intellectually challenging and globally connected learning opportunities.
- Enable every student to reach their potential, providing personalised support for transitioning successfully into and through their studies ready for the global workplace.
- Ensure learning within or outside of the formal curricula, in the classroom, online or digitally, is invigorated through engaged staff, supportive learning communities and innovative learning environments.
- Diversify the source and mix of enrolments through UOW Online and all our teaching locations to drive equitable access, growth and sustainability.
- Ensure academic integrity, quality and standards are embedded in our teaching as an ethos and through fit—for—purpose policies and efficient practices and processes.

UOW's Education Core Strategy and the following Enabling Strategies underpin the Education Core Strategy:

- UOW Core Strategy 2016-2020: Education
- Aboriginal and Torres Strait Islander Education, Research and Engagement Enabling Strategy 2016-2020
- Student Career Development & Employability Strategy & Plan
- Access & Participation Enabling Plan for Student Equity: A framework for the implementation of HEPPP 2018-2020
- Work-Integrated Learning Enabling Strategy

#### UNIVERSITY ADMISSIONS TRANSPARENCY

# How the University selects students for offers without an ATAR score, as part of its admissions process

UOW has an established Admissions Rubric which identifies qualities and attributes that UOW values when assessing applicants on a holistic basis. This Rubric facilitates decision-making where UOW does not have access to an ATAR score and is used to undertake a comprehensive assessment of the key factors that indicate potential for success in higher education. This rubric is often assessed in the form of a personalised interviews with an applicant and is complemented through review of preliminary subject results.

# What evaluation strategies are in place for ensuring that students admitted without an ATAR are likely to succeed in their studies

Applicants are evaluated against the above mentioned Admissions Rubric. The development of this rubric has been informed via a literature review identifying the qualities and attributes that are key factors that drive the potential for success in higher education.

Where students are admitted without an ATAR their basis of admissions is captured and UOW tracks this cohort of students' progression. Each year first session results are analysed to determine subject success rate and average WAM. These metrics are compared to the commencing cohort average and where appropriate cohorts who entered on the basis of ATAR allowing the success of the Rubric to be monitored and modified where appropriate over time.

#### UNIVERSITY RETENTION STRATEGIES

Strategies to reduce the proportion of students that do not complete their course (including for students from regional and remote areas)

UOW engages a number of interdependent strategies to enhance student progress in their course. Overseen by the Student Academic Experience Sub Committee and associated Student Success and Retention Task and Finish Group strategies are devised to address student attrition at an institutional, course and individual level.

Strategies at an institutional level include effective orientation and induction programs, proactive outreach initiatives to targeted cohorts of students, such as mature age and part-time students, as well as institutional monitoring and evaluation of these activities. In addition to this, UOW has a significant commitment to ensuring that students from regional, rural and remote areas are supported through their studies, through a network of regional campuses that are located in Bega, Batemans Bay, Shoalhaven and Southern Highlands.

At a course and subject level, strategies are tailored to the needs of the cohort, and are also targeted at courses with identified need or that have high levels of students with identified markers associated with slower progress. Curriculum embedded strategies such as common first year subjects, grouping students into pods, work integrated learning and transition pedagogy are utilised to encourage student progression through their course. Learning developers collaborate with faculties to embed study skills, literacy and numeracy into identified subjects and courses, and to provide purpose built student workshops aligned with identified subjects. Learning analytics is employed to optimise learning through the capture, analysis and reporting of data about learners and their learning contexts, with particular focus on the near real-time delivery of insights derived from data to both students and academic staff. In addition to this, co-curricular strategies are also utilised through Peer Assisted Study Sessions (PASS), and precommencement bridging programs.

At an individual student level, a suite of support strategies is available to students such as careers services, English language support for non-English speaking background students, peer academic mentors, learning development, counselling, disability services, student support advisors and tailored support embedded at Woolyungah Indigenous Centre (WIC). UOW is currently piloting a student success coach strategy across the institution, which is underpinned by a strengths-and-needs analysis tool that allows students to self-reflect and engage in the most appropriate support that is available to them.

# Evaluation of these strategies, including follow-up with students who do not continue with their studies to better understand the reasons for this decision.

UOW engages a number of evaluative measures to monitor and understand the impact of the strategies outlined above. Comprehensive data systems provide real time data through the UOW tableau dashboard to enable evaluation of courses, subject and student performance, and to effectively compare data between and within courses, faculties and our course delivery locations (both onshore and off shore). Annual Course and Student Outcomes meetings with senior central and Faculty staff establish agreed actions that are monitored and reported on.

Learning Analytics is employed across the institution with a strong focus on undergraduate commencing subjects. Timely, systematic reports are provided on student behaviour and progress within a subject to enable subject coordinators to provide active outreach to students of interest. UOWs has also recently launched an exit survey to better understand reasons for student attrition, as well as a re-engagement strategy to support students who have partially completed their course to return to study. UOW's Student Academic Experience Sub Committee monitors the range of student data, including student retention and attrition, across the university and establish agreed actions for collaborative work.

UOW has also developed an Equity Evaluation Framework to more effectively measuring the impact and associated outcomes of course and program level strategies. This will enable us to better understand the value of our strategies and to inform continuous improvement.

## RESEARCH AND RESEARCH TRAINING AND INNOVATION

## Strategies to ensure excellence in research and the strengthening of research capability

- Targeted recruitment and retention, professional development and structured career pathways for high esteem and emerging researchers.
- Provision of leading-edge research facilities, resources and infrastructure to shape the University's research and innovation profile and to optimise accessibility, utilisation rates and productivity.
- Encourage incentive schemes and recognition to reward high citations, discipline specific excellence, increased engagement with industry, spinouts and companies into iAccelerate.
- Develop and embed a knowledge exchange and research impact culture and framework.
- Build on our leadership in transdisciplinary research through further collaboration in research and education to explore and tackle large scale global social, environmental and economic challenges.
- Develop and implement Equity, Diversity and Inclusion strategies for research that increase leadership capability, maximise the talent pipeline, build equity capacity and promote agility.
- UOW's Global Challenges Program combines diverse research teams to address real-world problems beyond the scope of a single discipline, in collaboration with industry, government and wider community.

# Strategies for the provision of high quality research training, including measures to encourage PhD industry placements. This information should identify the expected number of industry placements.

- Enhance support and professional development for Higher Degree Research (HDR) students and supervisors through new research training programs through the GRS, aligned to productive and high quality research areas and based on expectations of performance and high completion rates.
- Promote and support joint PhD programs and placements of HDR students with international universities.
- Promote doctoral training programs with external industry (e.g. via ARC research hubs and training centres) and social enterprises (e.g. iAccelerate) to enable them to ensure their successful careers in academia, government and industry.

Our graduate research programs allow us to engage with industry and external partner universities via mechanisms such as matching scholarships and joint PhD programs.

## Graduate Research Training Initiatives

The Graduate Research School (GRS) is committed to improving the HDR student experience by using an integrated approach to research training to improve both research and career skills. HDR graduates undertake a range of careers across academic, industry and government so need a broader range of generic job-ready skills to undertake careers outside the traditional academic pathway. Both formal coursework and training modules are offered to our HDR students to improve completion outcomes and HDR graduate employability.

# Research training pathways

The Masters of Research (MRes) was created as an alternative two year research pathway for admission into PhD training. All MRes students undertake a mandatory coursework subject, *Responsible Research* training. The subject had a record number of 40 enrolments in Autumn 2019 and will be offered to all PhD (Integrated) students in 2020.

The GRS is committed to providing an exceptional research training experience through initiatives such as skills training workshop series. A number of initiatives have been instigated in response to the RTIP recommendations including the establishment of a HDR Training (HDRT) Advisory Committee. A task group has also been established to develop strategies to build capacity and support Indigenous students in HDR programs.

A key priority of the HDRT Advisory Committee is to develop a *UOW Graduate Researcher Framework* that addresses transferrable skills training and quality of T-shaped graduates in HDR training. The proposed framework encompasses six core attributes: experts in their fields,

changemakers, effective communicators, strategic thinkers, collaborative contributors and global citizens.

UOW's 2030 Vision positions GRS as a global leader high quality and innovative HDR training. The changing landscape in research training requires us to think and work in new and different ways. Supervisors have an important role to play in facilitating change and ensuring we provide the highest quality research training and prepare graduate students to become future leaders in their fields who drive innovation, and advance knowledge and understanding. The GRS is developing a UOW Supervisor Development Program to inform and assure quality HDR supervision, which will be implemented in 2020.

## **Industry Partnerships**

Research training needs to be more focused on training graduates who are capable of adding value through innovation, entrepreneurship, global competence and leadership. Our students and graduates need to create innovations and convert scientific discoveries into products and services. They need to understand business and commercialisation processes, legal aspects and the social sciences required to get products to market. UOW is committed to offering our HDR students access to courses and training opportunities in these areas, including internships, to gain the skills that would make our graduates more employable to industry.

UOW offers HDR matching scholarships, which allow research supervisors to match industry and university funds to support PhD students working on industry projects. Demand for matching scholarships has increased significantly recently, illustrating the strength of our industry partnerships.

UOW is seeking to improve engagement with internship programs, via placements at iAccelerate. Three PhD students were offered internships at partnered iAccelerate companies in 2018. Six HDR students have also had opportunities to undertake industry placements through APR. Intern, the national industry engagement scheme.

UOW is also committed to developing Doctoral Training Centres (DTC), which brings together cohorts of research students, each with individual projects, who collaborate in a particular interdisciplinary area. The ARC Industrial Transformation Training Centres (ITTC) are an excellent model to initiate this. For example, the ITTC for Advanced Technologies in Rail Track Infrastructure (ITTC Rail), headquartered at UOW, will provide training for 21 PhD students, including 12 month placements in industry, to become the next generation of rail engineers.

#### **I**nternational Relationships

The GRS is seeking to increase the number of joint PhD students via partner university agreements. As part of the initiative to enhance research links with our international campuses, the GRS is in the process of recruiting around 10 staff members from UOW Hong Kong to undertake doctoral studies in the HASS disciplines via distance learning. An MOU regarding Joint PhDs has also been signed with universities in the University Global Partnership Network.

Strategies to encourage research translation and commercialisation, including collaboration and engagement with industry and other end users, and the measures of success that the university monitors in this area

- Leverage strong local, national and international alliances and partnerships to assure our research impact, engagement with industry and economic contribution via spinouts and start ups
- Continue to offer our commercialisation partners easy access to our intellectual property to ensure our research outcomes reach end use and create impact
- Grow our innovation ecosystem where staff, students and community have opportunities to start and build or work in industries for regional development
- Create pathways for our research and scholarship to have beneficial impacts on the broader community by establishing more partnerships, collaborations and interactions with industry, government and community organisations, locally and globally

 Leverage our programs, networks and campuses to partner with industry and social enterprises, particularly technology focussed SMEs, to enable them to innovate and thrive in increasingly competitive markets

Measures of success include: number of (new and repeat) businesses engaged in collaboration research grants and contracts; development of new regional innovation hubs; number of staff undertaking commercial research.

### Strategies to promote open access to research publications and data.

• Improve visibility and discoverability of UOW research through increased uptake of UOW Scholars online profiles and implementation of ORCID IDs to all UOW researchers.

## **EQUITY**

## Strategies for improving Indigenous outcomes and related targets

Woolyungah Indigenous Centre (WIC) is the primary driver and strategic owner of programs, activities and initiatives related to Indigenous student retention, recruitment and completion for UOW. WIC's student centred approach to service delivery is illuminated through the implementation and utilisation of the Students Strengths & Needs Assessment tool. The use of this tool allows individualised and tailored success planning for our students. The aim of the tool is to provide a proactive approach to managing potential risks and factors that may impact negatively on our student's academic success.

In addition, our holistic approach also includes access for all students to our newly created in-house Academic position. The teaching model is proactive and attempts to eliminate the reactive management of our identified at risk students. Agile, readily accessible and responsive academic support for our students is central to this newly implemented role. A strategic element of the role is to provide students with identified support through the tracking and trending of their individual academic journey. This compliments our tutoring program where our Indigenous students are able to access high quality tutors for their individual subjects.

UOW Council has committed to growing enrolments of Aboriginal and Torres Strait Islander students to 2.5 percent by 2020. As part of UOW's Reconciliation Action Plan, UOW is are developing and delivering a comprehensive suite of Aboriginal and Torres Strait Islander school student engagement programs, and activities to engage Indigenous mature-age students.

# Strategies for achieving equity for regional and remote students, for low socio economic students and students from other equity groups

UOW has an 'Access & Participation Enabling Plan for 2018-2020' that outlines the university's strategy to increase the participation of students from equity backgrounds. Underpinning this strategy is the University's Achieving Purposeful Transitions Framework and Action Plan that outlines principles of whole student, whole journey, whole institution and evidenced-based approaches to strategy, program and activity design that places co-creation between staff and students at the centre of our approach to supporting equity student cohorts. Through this plan, a number of strategies have been activated across UOW which have included embedding equity principles in policy development and renewal, developing interventions that are contextualised to courses with high proportions of equity students enrolled and remodelling our approach to equity scholarships. In addition to this, targeted programs have been developed for students who are first in their family to attend higher education from the point of application through to their final year of university. This has included peer and alumni mentoring programs, priority access to support services as well as building a positive institutional culture about first generation students.

Strategies for reducing unemployment in the regions serviced by institutions, including youth unemployment rates

UOW has established the Bega Valley Innovation Hub as a means to creating and building a successful innovative economy and creating jobs for the future of the Bega Valley. The hub is designed to be an eco-system that supports our growing economy and a supportive community to help the community to build and grow their business ideas. This is part of a larger commitment at UOW, with iAccelerate based at UOW's Innovation Campus designed to support businesses and individuals grow their own ideas. UOW has also launched a new work experience program for students and community members to provide increased access to meaningful work experiences for students across UOW's geographical footprint.

# Strategies for increasing student support for relocating students (potentially including specialised on-boarding programs)

As part of UOW's regional campus network, contextualised support is provided to regional, rural and remote students in transitioning to university study. These campuses provide a bespoke approach to tailored orientation and offer a suite of bridging programs to students to prepare them for study, as well as personalised access to support services to support student progression throughout their degree.

UOW's Get Started Program is also designed to assist students in making the transition to higher education. With specific resources and activities designed for relocating students, students have the opportunity to engage in student-led workshops and activities to enable their transition into university.

UOW's Accommodation services also offers an accommodation guarantee for all relocating students and has an induction program for relocating students. There are also a range of regionally focused scholarships for students to assist them in making a smooth transition to university.

### Strategies to increase community access to university facilities

UOW has a strong commitment to increasing community access to university facilities and actively undertakes activities which aim to achieve this. From a holistic community perspective, this includes activities such as campus tours and engagement of community leaders in a range of UOW's strategic activities. The community campus tour program is targeted at community members who may not otherwise visit campus. Tours feature the many on campus facilities that are open to the public including the UOW's Early Start Discovery Space, Library and Maker Space, UOW Pulse recreation and aquatic centre and the UOW Science Space and Planetarium.

From an equity perspective, Early Start is a unique combination of community outreach, education and research initiatives, brought together under one roof with the aim of helping children realise their potential and live happy, fulfilling and healthy lives. Early Start's purpose is to help children flourish and realise their potential, particularly those from vulnerable or disadvantaged backgrounds and living in regional and remote communities. It is a revolutionary initiative that uniquely combines research, teaching and community engagement in the earliest years of life. Early Start is a new way of thinking about how the resources, the intellectual capital of a university and the rich body of research available can be put in direct contact with the community, and how technology can be part of the solution to bring about better outcomes for children. Early Start supports and enhances the ways in which people care for and work with children and engages with parents and communities to support the environments in which children can grow.

UOW also enables access to its facilities for individuals in a supported pathway to higher education. This includes both Year 11 & 12 students and mature age students who have aspirations for higher education, but may have barriers to accessing university. For these students, sustained programs are offered that include free weekly on-campus mentoring and tutoring, access to all of UOW's support services and facilities as if they were already a student as well as regular workshops to support students transition into higher education, such as scholarship application support.

The Digital Living Lab, a network of Long Range Wide Area Network (LoRaWAN) gateways across Wollongong allows users to harness the Internet of Things to enhance community development and wellbeing. Using this technology, UOW became the first university campus in Australia to have dedicated directional mapping for wheelchair users and this is being extended across the city of Wollongong.

# Strategies to increase aspirations and advice to school students on study options

UOW has a long-term commitment to outreach programs to over 50 high schools and 100 primary schools across the Illawarra South East and South-Western Sydney regions. UOW has developed a progression focused outreach program that commences engagement with students in year one and supports them through until two years post-schooling. UOW's overarching program includes a suite of activities from on-campus experience days, school holiday workshops, mentoring programs and inschool workshops. Through these programs students have discipline specific experiences, that include STEM, opportunities to explore indigenous knowledge's as well as experiences centred on literacy and numeracy. Careers advice is also embedded into outreach and recruitment initiatives to ensure that students are receiving the most effective study options advice. UOW has recently approved its 2030 vision for Outreach, which captures an increased emphasis on embedding indigenous knowledges and career development learning into all outreach activities.

#### LABOUR MARKET OUTCOMES

Strategies for identifying skills gaps within the relevant student and business catchments and, Strategies for meeting labour market priorities at a local, regional and/or national level

UOW has established an all staff accessible repository of labour market data called IQHQ, covering topics such as market demand, competitor intelligence, internal performance, demographics, student outcomes, future predictions of demand, all designed to inform strategic course development. UOW is also using Burning Glass employment demand data to inform its course offerings.

### Strategies to address employability and graduate attribute skills gaps to ensure students are work ready

UOW's Graduate Career Development & Employability Unit provides vision, leadership, and management of student career and employability matters at all UOW onshore campuses. Teams lead the delivery of a student-centred career-oriented strategy, aligned to the curriculum.

UOW Career Consultants are embedded within faculties and across campuses and work with specific student cohorts, consulting with staff, students and relevant stakeholders to establish tailored and contextualised Career Development Learning and Workplace Learning programs which increase the employability and enterprise skills of students.

The UOW Work-integrated Learning (WIL) Plan is a forefront education strategy for UOW. At its core the WIL Plan sets out to enhance student employability and improve graduate outcomes and the career readiness of our students, through the provision of quality assured WIL for all student cohorts that is integrated through the curriculum from first year and underpinned by Career Development Learning (CDL) principles and reflective practice. Particular attention is given to increasing access to WIL in non-vocational degrees or degrees with historically lower graduate employment outcomes or where *Quality in Learning and teaching Graduate Outcomes Survey* data results show graduates sitting behind the average median salary, for example in physical and natural sciences and information technology.

The recently endorsed UOW WIL Pedagogical Model includes an institutionally agreed definition of WIL; design principles and a curriculum classification framework. The framework enables UOW to more accurately examine the way in which WIL is integrated across a degree program addressing a gap and need in the Higher Education landscape to better describe, evaluate and support WIL activities. By making WIL more visible in all subjects, we are taking steps to ensure students have access to WIL opportunities during their degree program. In addition, UOW provides access to Career Ready and Professional Practice Subjects at undergraduate and postgraduate level specifically designed to enhance students' employability and career readiness.

All first-year students complete a compulsory module, CareerSmart, which introduces students to career, employability and entrepreneurial thinking and integrates a career exploration assessment tool. The module aims to help students learn about what skills they have, what employers want, and how to potentially fill in the gaps while they are studying at UOW.

UOW also offers the UOWx, a co-curricular recognition framework with the aim of recognising transformative learning experiences for students outside of the formal curricula. It provides a framework for existing co-curricular activities and cultivates new learning opportunities at UOW that promote personal and professional development, as well as active citizenship. UOWx provides students with formal recognition of these co-curricular experiences which translates the knowledge and skills gained from these opportunities to the community and graduate employment market.

### How labour market strategies are taken into account in developing course offerings

UOW's course development strategies and processes are grounded on a focus on quality, viability and strategic alignment. Viability issues are directed to evidence of sustainable demand for courses, informed by evidence of labour market demand. Faculties proposing new courses are required to consider a range of criteria (embedded in the course development process) including student target market characteristics, relevant labour market trends, relevant labour market needs and, competitor analysis in order to determine sufficient and sustainable demand.

Course development and course review includes processes to engage directly with external industry and sector views. At the course development stage, a new course must be reviewed by an External Course Appraisal Committee, on which at least two external members sit. Similarly, course reviews are overseen by a Course Review Panel with the same requirement, that is, two external members.

UOW has completed a course portfolio review project that includes recommendations on improvements to the assessment of course viability, and work is underway to incorporate these changes into course development. The intent is to be more flexible and responsive to changing market conditions.

In addition to this, new course development is also shaped by the requirements of the UOW Curriculum Model, a set of five transformational practices that include "Capstones@UOW". All UOW courses provide students with a capstone experience: a major project, workplace or other authentic opportunity that integrates and applies the knowledge and skills gained throughout their course to real world problems. This supports work readiness and the transition from study to the world of work.

A tool for embedding CDL in curricular and co-curricular contexts, the UOW Career Development Framework, currently in draft, will support equity of access to CDL skills for all students at UOW. Contemporary career models that better reflect the changing world of work, social and environmental influences on career and the importance of connectedness learning to help students make the most of their social networks, provide a solid underpinning for a comprehensive CDL program.

As articulated in the UOW Curriculum Model, MyPortfolio@UOW aims to "allow students to reflect on, document, evidence and share their achievements and their evolving understanding of, and progress toward, key disciplinary and professional concepts and practices". The UOW Curriculum Model describes how assessments in selected subjects in each course will be designed for inclusion in students' ePortfolios. In addition, MyPortfolio@UOW provides an avenue for reflection and evidence related to co-curricular, extra-curricular and career development learning.

A cross-institution working party was established in 2019 to inform an institution wide approach to the implementation of the ePortfolio mechanism to expand and improve portfolio use across the university. This work is informed by and builds on the experience of the Faculty of Engineering & Information Sciences (EIS) who have successfully implemented a compulsory ePortfolio across all ten engineering degrees: civil, computer, electrical, environmental, biomedical, materials, mechanical, mechatronics, mining and telecommunications.

The UOW EIS model incorporates QILT's Employer Satisfaction skills and attributes framework requiring students to document evidence across five graduate attribute domains or scales: foundation skills, adaptive skills, collaborative skills, technical skills; and employability skills.

#### The application of these strategies to admissions and enrolments

UOW has transformed its Early Admissions process which includes introducing mechanisms to provide prospective students with effective careers advice to inform the decision making process.

As well as having access to UOW's team of career consultants for workshops and personalised consultations during the Early Admissions, students can also access UOW's CareerSmart Discovery tool, a career and education planning systems designed to university students with personalized career and education exploration and planning services.

The discovery tool will allow early admission applicants to reflect on their career planning readiness, career relevant interests, skills, personality type, values, leisure time recreation activities.

Students can then use their results for personalised career exploration and to identify majors and careers for further exploration.

At UOW's annual Open Day, experts from all disciplines and study areas are on hand to answer prospective students' questions about their courses and degrees as well as study abroad and scholarship opportunities. At the Careers Service booth, students can meet with an experienced career adviser for a one-on-one personalised consultation and find out about the courses and support services available while they study.

## SECURITY MEASURES

Actions being taken to ensure the safety of data against cyber attack; Mitigation strategies in the case of a breach of security; How the University complies with the Australian Cyber Security Centre's "Strategies to mitigate cyber security incidents" document; Measures in place to enhance the identification and deterrence of foreign interference activities including actions to ensure compliance with relevant legislation.

UOW has a robust Cyber-Security Framework and Strategy which is supported by a dedicated Cyber-Security Team.

UOW's Cyber-Security Strategy is based on an international best-practice framework and the principle of Defence in Depth, which uses a layered approach to protecting our systems and data. In addition to the protections at various layers within our overall network architecture, the UOW Information Management and Technology Services Cyber-Security Team perform a broad range of regular, ongoing assurance activities. These include reviewing firewall configurations, policy exemptions and risk records, manual log checking, account and access reviews.

UOW also receive information on a daily basis from multiple sources covering threat intelligence, vulnerability bulletins, breach and compromise reports, and cyber security research, to ensure that we keep up-to-date on risks and threats that could impact UOW.

# Our strategies to mitigate cyber security incidents include the following:

### Patching applications

- Security vulnerabilities in applications and drivers assessed as extreme risk are patched, updated or mitigated within one month of the security vulnerabilities being identified by vendors, independent third parties, system managers or users.
- Applications that are no longer supported by vendors with patches or updates for security vulnerabilities are updated or replaced with vendor-supported versions.

## Microsoft Office macros

- Microsoft Office macros are allowed to execute, but only after prompting users for approval.
- Microsoft Office macro security settings cannot be changed by users.

#### Restricting administrative privileges

- Privileged access to systems, applications and information is validated when first requested and revalidated on an annual or more frequent basis.
- Policy security controls are used to prevent privileged users from reading emails, browsing the Web and obtaining files via online services.

### Patching operating systems

- Security vulnerabilities in operating systems and firmware assessed as extreme risk are patched, updated or mitigated within one month of the security vulnerabilities being identified by vendors, independent third parties, system managers or users.
- Operating systems for workstations, servers and ICT equipment that are no longer supported by vendors with patches or updates for security vulnerabilities are updated or replaced with vendor supported versions.

## Daily backups

- Backups of important information, software and configuration settings are performed weekly.
- Backups are stored offline, or online but in a non-rewritable and non-erasable manner.

## In regards to identification and deterrence of foreign interference we conduct the following

- A number of penetration tests for core applications are routinely conducted by an external security company.
- Advanced Endpoint protection for managed machines to protect against malware and ransomware.

## **Future enhancements**

- We are in the process of deploying an Identity and Access management solution.
- Adoption of an overseas travel policy providing clean devices where warranted.

## SIGNED for and on behalf of

#### THE COMMONWEALTH OF AUSTRALIA

by Danielle Donegan, Acting First Assistant Secretary, Higher Education Division of the Department of Education, Skills and Employment as delegate of the Minister for Education.

## Signed by

Danielle Donegan

Date: 17 December 2020

In the presence of:

Signed by

Sabrina Kim

**Position of witness** 

Policy Officer

# SIGNED for and on behalf of University of Wollongong

Signed by

Professor Paul Wellings CBE

**Position** 

Vice-Chancellor

In the presence of:

Signed by

**Stacey Thomas** 

Position or profession of witness

Senior Executive Asisstant