

#### ANU COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

11 November 2020

# **Part 1: Formal Change Process**

The College of Engineering and Computer Science (herein referred to as CECS or the College) released a change management proposal on 15 October 2020. The formal consultation period ran from 15 October 2020 to 29 October 2020 and, upon request, was extended by one day and closed on 30 October 2020. During this period, there was extensive consultation undertaken and there was a level of understanding expressed regarding the need for the proposed changes.

This document, the Change Management Implementation Plan, reiterates the key details of the proposal, outlines the consultation and amendments incorporated from the consultation, and details the implementation schedule.

Colleagues and stakeholders are thanked for their thoughtful contributions and feedback and the extensive engagement received throughout the consultation process.

# **Background**

To put the Australian National University (ANU) on a sustainable financial footing from 2021, the ANU Council approved the development of the ANU Recovery Plan, designed to address the University's strategic and financial challenges. The Recovery Plan outlines how ANU will meet its current and future financial obligations and achieve our strategic objectives as outlined in the Australian National University 2017-2021 Strategic Plan, with sustainable, stable, and secure financial foundations. The ANU Recovery Plan outlines how we will continue this trajectory and reduce our size with a smaller student cohort; and in parallel, a smaller staffing profile.

The challenge for 2021 and beyond is to ensure the ongoing ability for the ANU to operate within our highly constrained projected revenue. It is not good enough just to survive the pandemic; we must thrive and help provide the building blocks for national recovery. The core outcome of the ANU Recovery Plan is that the ANU must close a remaining financial gap of \$103 million per annum from 2021. This requires savings in both non-salary and salary expenditure and will require a reduction of positions across the University.

This implementation plan outlines the reorganisation required to deliver the strategic objectives of the ANU and the College, and the necessary adjustments to reduce the College costs to operate within the budget confirmed in the 2020 ANU Recovery Plan. The changes within the College will see a holistic restructuring of CECS with three broadly defined new schools and a transformed professional and support services. By reducing organisational complexity and size, it will be possible to have a consistent and resourced focus. These changes will support ongoing sustainability of our education and pedagogy and ensure that the College is meeting the future needs of our students, as well as placing the University strongly in the global market.

#### Part 2: Overview of Consultation Process

#### **Consultation Period**

The consultation period for the CECS Change Management Proposal commenced on Thursday 15 October and concluded on Friday 30 October 2020. The consultation period was originally scheduled to close on Thursday 29 October 2020 and was extended (by request) for a further period and closed on Friday 30 October 2020.

On 15 October 2020, the Dean of CECS released the CECS Managing Change Proposal at a Town Hall meeting attended by 187 staff. The Change Proposal was published on the <u>CECS Recovery Website</u> following the Town Hall meeting. A link to the to the proposal was provided to all CECS staff following the meeting. A copy of the Change Proposal was also provided to the National Tertiary Education Union (NTEU) and available to other University stakeholders through the CECS Recovery webpage.

During the consultation period, and in response to feedback received and questions asked, additional material was made available and responses to frequently asked questions dynamically updated. The information and materials made available on the CECS Recovery page included:

CECS Managing Change Proposal;



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- FAQs;
- Recording of the CECS Town Hall;
- Initial information about the consultation schedule; and
- Support services available to staff and students.

In addition to the Town Hall meeting 8 forums were held during the consultation period to engage with staff and students from across the CECS community.

# CECS community Town Hall meeting and Forums

CECS Town Hall	Thursday 15 October, 9am
Release Change Paper to CECS Community	
Consultation period commences	
RSCS Staff Forum	Monday 19 October, 11am
RSEEME Staff Forum	Monday 19 October, 12pm
Software Innovation Institute Staff Forum	Monday 19 October, 2pm
3A Institute Staff Forum	Monday 19 October, 3pm
RSAMEE Staff Forum	Tuesday 20 October, 12pm
Professional Staff Group Forum	Tuesday 20 October, 2pm
HDR Students Town Hall	Friday 23 October, 9am
Coursework Students Town Hall	Friday 23 October, 10am

# Feedback and questions

During the consultation period, we received extensive feedback and questions through the CECS question portal, ANU Recovery website, email, staff and student forums and individual meetings. Based on the considerable feedback and engagement on the proposed changes, the consultation period was extended by one day to close of business on Friday 30 October 2020.

At the close of the consultation period on 30 October 2020, 97 pieces of individual feedback had been received. Of those, 81 pieces of feedback were from staff, 2 from students, 1 from the NTEU, and the remainder from other stakeholders or from parties who had not indicated their relationship to the College. Some questions were answered during the forums and replies were sent directly back to the respondent if they questions could not be answered in the forums.

Some feedback raised questions and requests for information regarding individual employee arrangements. Separate responses were provided directly to those team members who raised specific questions about their individual circumstances. These are not detailed within the Implementation Plan. Frequently Asked Questions (FAQs) were prepared in response to some common questions and feedback from the CECS and wider ANU community and published on the CECS Recovery website. They were dynamically updated in response to questions and feedback throughout the consultation period. The FAQS are included in Appendix 1.

The consultations and ensuing discussions have been critical in the development of this Implementation Plan.

#### **Overview of Feedback**

The time and thought invested by university staff and broader community in providing valuable feedback regarding the change proposal are acknowledged and appreciated.

All feedback was given serious and detailed consideration. There were a number of positive and relevant suggestions presented throughout the consultation period, along with some clarification sought regarding how certain elements of the proposed new structure would be implemented and to achieve the strategic objectives of the ANU Recovery Plan and the College.

There were 97 submissions received during the consultation period. The key themes, in no particular order, were:

- a) Level of detail provided, consultation and the need for change;
- b) Academic structure;



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- c) Academic education program change;
- d) Timing and nature of the PSG restructure and consequential changes to workflows, workloads and accountabilities;
- e) Impact on the diversity of staff in the College;
- f) Implementation processes; and
- g) Errors, inconsistencies and clarifications

To protect the privacy of respondents, individual items of feedback will not be released as they could identify the respondent.

#### THEME A: Level of detail provided, consultation and the need for change

During the consultation period, there were a number of questions or comments relating to the level of detail provided, the genuineness of the consultation process and seeking further understanding of the rationale and reasoning for the proposed changes within the College.

#### The need for change

It is important to acknowledge that the decision to propose changes of this scope and scale was not entered into lightly. The CECS community have worked hard and diligently to contribute to the mission of the ANU over many decades, and the effort, passion and commitment to that broader mission is not in doubt. The challenge for the CECS community, and for the ANU more broadly, is to adapt to a radically different ecosystem, and to build a new kind of sustainable model for education, research and impact. Whilst CECS has an orientation to change and evolution, and a track record of adapting to broader shifts in the higher-education sector, the proposed changes are far bigger than previously contemplated and they represent a significant departure from previous structures and arrangements.

As outlined in the ANU Recovery Plan, ANU Council approved a 2020 revised budget in July 2020 which forecast a full year deficit of \$219 million, excluding investment returns. Without taking further action, ANU costs will be significantly higher than revenue for at least the next three years. ANU would face a 2021 deficit of \$192 million and of a similar size again in 2022 and 2023. Simply put, we need to look toward more sustainable savings beyond 2020. The ANU Recovery Plan is built on the Financial Health Strategy for the next three years which includes achieving an ongoing reduction in expenditure each year of \$103 million, running an operating deficit each year no higher than our restructuring costs and depreciation, and taking on more debt to fund our capital investments and cash requirements. It is important to note that, even with the savings required for 2021, the ANU is still expected to have a deficit in 2021-23.

Circumstances have forced very difficult choices about what we can continue to do, and what we must pause or can, unfortunately, no longer do. Ultimately these decisions are informed by more than historic quantitative data. A number of factors have informed rationale for the changes proposed to CECS, including: prior modelling of education, research and impact activities, prior modelling of budgets, prospective revenue, prospective budget models for 2021 and beyond, CECS and ANU strategic initiatives, the conditions of the Reimagine Investment, ANU obligations and commitments, our commitments to our students, industry, community and governments, and the ANU Recovery Plan.

The external advisory panel referenced in the original Change Proposal was another one of the sources of input to the nature of the changes that were proposed. The Terms of Reference for that panel are included in Appendix 2.

The 2021 pre-Research Support Package (RSP)-boost allocation to CECS is \$53.3M, inclusive of an expectation to invest in the agenda set by the ANU Recovery Plan, the Reimagine Investment and the ANU strategic investment in the Innovation Institutes. With the notable exceptions of the decisions to shut down the Reimagine project management office and pivot the Cyber Institute to a virtual Institute, the main savings achieved in 2020 were not structural. The 2021 budget allocation to CECS also comes with an expectation to address the underlying structural adjustments required to achieve financial sustainability in the post-COVID environment.

#### More details and data

Requests were made during consultation for more data regarding historical finances, student load, ANU modeling of future load and revenue to various organisational units. Clarifications to specific local questions were provided during the consultation period and embodied in FAQs 11 and 12 which were



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made available on the CECS Recovery page. The ANU Recovery page also contains detailed financial information and models to support the financial information and data included in the CECS Change Proposal.

CECS and its organisational units have a long history of sound financial management under the financial allocation and expenditure processes. The changes proposed are informed by historical data, but this is not a normal state. The sector, University and College are all experiencing a break from the past and that includes a break from the historic ANU approach to revenue, allocation and expenditure. The new structure and operating model of the College was built from a blank sheet of paper rather than as a distribution of cuts and then subsequent mergers.

A longer-term approach to setting resource allocations and expectations for Colleges and Portfolios is being contemplated by the University and Senior Management Group right now. At this point in time, there is no specific information available about the allocation to the College or its organisational units in out-years.

#### Consultation

Formal consultation for the proposed changes was undertaken from 15-30 October 2020. The changes proposed and outlined by the College in the Change Proposal were proposed only. No decisions on the final organisation and structure of the College had been made and all suggestions and feedback were encouraged and taken seriously before the final plan for the College was confirmed. The University remains committed to consulting with the University community and continuing to engage with as many members of the community as possible moving forward and throughout the implementation of the ANU Recovery Plan and the changes confirmed within CECS.

#### THEME B: Academic Structure

# Streamlined organisational structure

There were positive comments presented throughout the consultation period regarding the proposed simplified and streamlined academic structure and the more inclusive naming of the Schools.

#### Clarification of the intent, role and functioning of academic activity clusters

The University's strategic focus is to deliver to a high quality of impact. The Activity Clusters represent a new organising model for work within the College that will help us achieve this strategic goal. The Activity Cluster, as a defined focus area, means that education, research, and engagement activities can be consolidated into distinctive, financially sustainable, concentrations of excellence that have impact and are aligned to the ANU Recovery Plan. The Activity Cluster model allows the College to maximise its limited resources and increase the potential for meaningful impact from a lower cost base. A clear consequence of selection means that certain areas of work can no longer continue to be supported within CECS. This is always a difficult decision.

The Activity Clusters are not intended to be independent silos: cross-cluster, cross-School and cross-College alignment and coordination will be actively encouraged. Similarly, interdisciplinary approaches to and within Activity Clusters will be actively encouraged.

Feedback and representations from some colleagues from within CECS during the consultation period expressed concern regarding the possibility of widespread use of Field of Research (FoR) codes. FoR codes have been used as part of the process to determine eligibility criteria for direct transfer to a nominated Activity Cluster, where other direct transfer criteria could not be established as part of the Change Management Proposal. In recognition of the limitations of FoR codes, determination of eligibility for direct transfer will also consider publications, current research grants, HDR supervision, teaching programs and service (university and industry). The College does not propose to use FoR codes more broadly moving forward. Consideration of the criteria outlined above to enable a direct transfer to be confirmed will be undertaken by an expert panel which will include nominees from within the College, the University and from external experts as appropriate.

# Reconsideration of the proposed academic activity clusters

Feedback and representations were made regarding the chosen Activity Clusters including suggestions for amendments, alternative, additional, and/or differently sized academic activity clusters. The identified Activity Clusters build on existing and recognised strengths in the College with regards to



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research, education and impact, as expressed in the Schools and Institutes. Furthermore, they are aligned to the direction set in the CECS Reimagine Investment, and the ANU Recovery Plan.

The feedback regarding Activity Clusters is acknowledged however, the selection of the Activity Clusters remains largely unchanged, with the following exceptions:

Alignment of Externally Funded Fellows to Activity Clusters Multiple representations were submitted during the consultation period regarding one of the three externally funded Fellows within RSEEME who had been identified as not being aligned to an identified Activity Cluster. Feedback indicated this Fellow should be considered as eligible for the Electrical Engineering cluster. It has been confirmed the eligibility for the Externally Funded Fellow position to be allocated to the Electrical Engineering Cluster will be considered by the Expert Panel as part of the outlined process for Activity Cluster allocation and determination for eligibility for a direct transfer. Should the Expert Panel determine eligibility for the Electrical Engineering Cluster, a Level D position will be created in the Electrical Engineering Cluster within the School of Engineering. In the event the Expert Panel does not confirm the Fellow as aligned to the proposed Electrical Engineering Cluster, the University and College will continue to work with these individual staff members and colleagues across the University to determine if the role can be transferred to other Research Schools in alignment with strategic priorities and expertise in those Colleges and Schools

Electrical Engineering Activity Cluster. The cluster description for Electrical Engineering has been amended to capture elements identified in the feedback received. Multiple representations were submitted regarding the importance of maintaining existing critical mass in the Electrical Engineering Activity Cluster. The considerations presented covered the implications of staff losses on the overall intellectual and financial sustainability of the cluster and articulated the beginnings of a plan to achieve financial sustainability along with commitments to implement said plan. Having considered this feedback, it has been determined the number of Level D/E positions will be increased by one in each Electrical Engineering Activity Cluster. It must be acknowledged that the aggregate changes to the Electrical Engineering Cluster constitute a significant increase in resources deployed to that activity at the expense of other activities. As a consequence of the one-off nature of the Commonwealth RSP funding, the overall budget allocation to CECS is expected to decrease at the end of 2022. Additional work will be required within the Electrical Engineering Activity Cluster over the next two years to secure the financial sustainability of the cluster for the long term.

Secure Software Systems. The cluster title for Secure Software Systems has been amended to "Computing Foundations" to capture feedback regarding the composition of the (now called) Computing Foundations Activity Cluster. Based on feedback, the range of FOR codes used to determine eligibility for consideration in the Computing Foundations Activity Cluster will be expanded to include 0802.

# Clarification regarding cross-cluster, cross-school and cross-college academic activities

Multiple representations were made regarding the importance of cross-cutting thematic activities, including telecommunications, human-centred computing, design, biomedical and systems. Some feedback drew the identified clusters together to propose new ideas for activities. Those ideas will be carried forward into 2021 for further consideration.

Some of the feedback sought reassurance that the College remains committed to those cross-cutting activities. The College is obligated in the University and national contexts to meet the evolving expectations of engineering, computing and the use of technology in the world. The Reimagine investment is intended to drive new forms of collaboration, research, education, engagement and impact. These are predicated on cross-cutting thematic activities, build on existing work and relationships and are instantiated in the choices of Activity Clusters for the College. The College reaffirms its continuing commitment to supporting cross-cutting activities.



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#### THEME C: Academic education program changes

Students are valued and important members of the CECS and University community. Their input and involvement in discussions of the proposed changes has been important and will continue to be so. A high priority for the College, and across the University, is to deliver strong educational experiences as a basis for our students to take advantage of more flexible future study and career opportunities. Current students in programs or majors which have been proposed for disestablishment in 2021 or 2022 will be supported and have pathways to completion of their intended programs. Teach-out plans will be developed to ensure that students can satisfy the requirements for their programs and not be delayed in their progression. In any teach-out plans, some courses may be substituted in program requirements to enable completion for students where individual courses are not available, but every effort will be made to substitute like for like. Accreditation of programs will be unaffected and all changes are subject to standard ANU educational governance oversight.

Engineering education majors and augmentations: Changes to the majors and augmentations were commenced external to and prior to this process; they needed to happen regardless of this process. Staff and students in the ANU community were consulted simultaneously on the engineering education changes over the period 3 September 2020 to 2 October 2020. A Consultation Outcomes and Response document was provided to RSEEME staff on 14 October 2020. In summary, the Bachelor of Engineering (including R&D) will remain but the majors (and minors) in Biomedical Systems and Mechanical & Material Systems are proposed to be discontinued, as is the Master of Engineering in Digital Systems and Telecommunications Engineering. Teach-out plans are under active development. As these changes are still working through the University's formal approval process, these programs were included in Figure 3 in the Change Proposal under "Programs, etc." and on page 21 as "Programs which will cease to be offered within the proposed new College structure and will require teach out arrangements". Currently enrolled students will be provided with a pathway to complete their chosen major. Discontinued majors will not be available to students commencing from 2021.

New engineering curriculum: The Environmental Systems major in the Bachelor of Engineering was approved by Academic Board on 20 October 2020 and is expected be available to students from 2022. Suggestions were received during the consultation period for new curriculum, including cross-cluster topics. These will be explored in 2021 and beyond.

Bachelor of Software Engineering (Honours): Feedback received during consultation suggested more sweeping changes to the ANU computing curriculum than those proposed. This will be explored as part of the consultation process involving the BSEng(Honours). With respect to the proposed discontinuation of the BSEng(Honours) the last entering cohort would commence in 2021. All current and incoming students in the program will have the option of transferring into the BAC(Honours). With the core course overlap between these programs this should be relatively straightforward. Affected students will be consulted to understand their preferences and concerns.

# THEME D: Timing and nature of the Professional Services Group (PSG) restructure and consequential changes to workflows, workloads and accountabilities

Professional staff services in the College are critical to supporting the activities of the College and in achieving the College's strategic intent and business continuity. Furthermore, suitable and sustainable management of workflow through implementation of and transition to a new organisational structure will allow PSG and academic staff to adjust to the sometimes irregular and new workflows and demands on PSG services. The feedback during the consultation process led to a number of recommendations and considerations that have translated into the following changes in the new organisational arrangements for the PSG and the Office of the Dean.

# Timing and nature of PSG change

A number of concerns were raised with regard to workload, particularly relating to peaks and troughs in activities, ineffectual and inefficient ANU processes and systems, the high transactional workload and the consequential risk of over-work. There were also multiple representations regarding ideas for amendments and alternative, additional, and/or differently sized professional services teams.



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The new PSG organisational arrangement has been designed to align our expertise to the proposed reorganization of the CECS school structure and strategy. It has been designed to enable it to operate within the financial envelope provided and in reasonable proportion to the scale of CECS and to ensure it is ready and can engage with service delivery changes across ANU.

It has also been designed to support improvements in workload management and service levels. The University's highest priority is the health, wellbeing and safety of our community, and CECS will continue to monitor workloads and respond to WHS issues. Where concerns are brought to the attention of management, they will be taken seriously and reviewed using established ANU processes.

The Resources and Service Provision Taskforce has been developing and consulting on a <a href="Service Performance Framework">Service Performance Framework</a> (SPF) to support the ANU Mission into the future. These considerations include how to develop frameworks for better service delivery and resource allocation to enable a leading-edge environment for students, academics, professional staff and partners in service experience, delivery and design. The framework will enable and support services to be collaborative, responsive, continuously improving, provide exceptional levels of service and deliver value for money. The ANU Service Performance Framework will be used over 2021 to remap service-delivery on an ANU-wide basis, including in the PSG.

A key part of the new PSG will involve developing new ways of working and integration with the ANU Service Performance Framework mentioned above. This will include working with the Operations Portfolio and relevant Service Divisions to support a whole of University approach to transactions and operations the Service partnership with Colleges and Schools.

#### PSG transition period

Further to the aforementioned concerns relating to workload, arrangements to support the transition to the new PSG organisational arrangement have been reconsidered.

The PSG reorganisation will now be implemented over an extended "PSG transition period." This transition plan will commence by December 2020 and is expected to span until the end of 31 March 2021. This transition period will enable the PSG to review, introduce or remap, and then implement processes and practices that aligns with the new structure, and finalise recruitment activities for any new and/or vacant positions.

The University's highest priority is the health, wellbeing and safety of our community, and CECS will continue to monitor and respond to WHS issues. Where concerns are brought to the attention of management, they will be taken seriously and reviewed using established ANU processes.

To ensure that suitable staffing and resourcing levels are maintained the transition period will allow for current fixed term arrangements to be extended in some instances. These arrangements will be considered on a case-by-case basis.

#### Amendment of position titles

Feedback was received from within the College and across the University regarding the proposed position titles within the PSG. This feedback has been considered and the position titles within the new PSG organisational arrangements have been updated to better reflect role specialization and ensure consistency with agreed position naming protocols and conventions across the University.

# Clarification regarding reporting lines

During consultation, feedback included a query regarding the reporting line of the proposed "WHS Manager". It is clarified that whilst the WHS Manager position will be located within the School of Engineering (contributing to a community of practice) –the role will maintain a reporting line to the Service Manager - Assets, to support the University WHS Framework and ensure accountability and compliance with legislative and University requirements.

#### Office of the Dean

There was a suggestion that consideration be given to the reporting and position title related to the proposed Sub-Dean HDR position (in the Office of the Dean). The suggestion was that the proposed Sub-Dean HDR (which was to report to the Deputy Dean via an Associate Dean) be modified to report directly to the Deputy Dean and be re-named as "Director HDR". This structure and position title would be consistent with other Associate Dean-HDR/Director – HDR positions and titles used across other



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Colleges. This suggestion has been adopted and has been updated and is included in the new organisational arrangements.

Suggestions were made to change the number of academic staff in the Office of the Dean. The structure has been designed to align to the achievement of strategic priorities as outlined in the ANU Recovery Plan and the CECS Strategic Intent and is consistent with other Colleges.

# THEME E: Impact on the diversity of staff in the College

The impact of change on diversity within and across the College was a prevalent theme in the feedback received.

In keeping with ANU commitments to a diverse workplace, data has been collated and the College will track the diversity consequences of the implementation of any structural changes.

Indicative data of the impact of structural changes on individuals suggests: an improvement in the percentage of female faculty; no significant change in the percentage of part-time staff; no decrease in First Nations staff; and no significant changes in the top 10 countries of birth for our staff.

Taking 1 July 2020 as a snapshot of "before" and 1 April 2021 (i.e., after the end of the expected transition period) as an indicative snapshot of "after", it is expected there is likely to be: no significant change in the ratio of professional to academic staff; a significant improvement (increase) in the ratio of continuing to fixed-term professional staff positions; and no significant change in the percentage of senior faculty positions (continuing, tenure-track, OPP, FERL and CS Futures academic staff) as a fraction of academic staff.

# THEME F: Implementation processes

#### Clarification on the position of fixed-term and part-time staff employed in the College

ANU is committed to offering a range of flexible working arrangements. The University considers flexibility holistically as part of a conversation about team operational requirements - balancing responsibilities, achievements, personal and professional development and success at work. Arrangements like job sharing or reduced hours are currently available and can be implemented by agreement between staff members and supervisors, ensuring the operational requirements of the work area.

These arrangements can be put in place for a fixed period, or as a permanent arrangement. The College will work with staff who wish to work part time. More information about flexible working arrangements at ANU can be found here.

Fixed-term positions are permitted at the ANU for specific reasons and each circumstance is unique. The College has committed to not terminating current fixed term contracts early. Staff who may have questions about their fixed term appointment are encouraged to discuss their individual circumstances with the contact person nominated for their area of the College and noted in Part 7 of the CECS Implementation Plan.

#### Clarification on the distinction between Expressions of Interest and Recruitment

In situations where it is not possible to confirm direct transfer of positions, an expression of interest (EOI) process will be run. Affected staff will be provided the opportunity to lodge applications through an EOI process for (at level) positions. A selection process will be undertaken based on the standard recruitment process of assessing applicants against the selection criteria for the roles. This selection process will include a formal selection panel and interviews may be held for short listed candidates.

The College seeks to confirm all direct transfers, including those subject to an EOI process, before the end of 2020. If EOI processes do not result in an appointment, vacant positions will be subject to internal (ANU wide) and external recruitment and formal selection processes.

All other new or vacant positions, not subject to an EOI process for affected staff, will be subject to internal (ANU wide) and external recruitment processes.



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ANU remains committed to advertising vacant available roles internally before seeking applications via external recruitment processes.

#### The Use of Expert Panels to confirm direct transfer of Academic positions

Colleagues asked about the composition of Expert Panels. In recognition of the limitations of FoR codes, eligibility for transfer mechanisms also include the use of an expert panel including nominees from within the College, the University and from external experts as appropriate. In addition to FoR codes, the panel will also consider publications, current research grants, HDR supervision, teaching programs and service (university and industry).

The Expert Panels will make a recommendation to the Dean and they will comprise:

- Director designate of the relevant School (Chair); and
- 2-5 members at Professor (including Professor in the Practice of) or equivalent, external to CECS with at least 2 members also being external to ANU.

Specific panel members are being approached now. The panels will be composed having regard for the diversity of expertise necessary.

# THEME G: Errors, inconsistencies and clarifications

Feedback included questions and observations about errors in the Managing Change Proposal. The College thanks the many keen-eyed readers and has reviewed the information and corrected any unintended errors. They include:

- The Change Management Proposal identified the Software Innovation Activity Cluster on page 6, it failed to include a description of the Software Innovation Activity Cluster in Appendix One. This has now been updated and is included with the full set of academic cluster descriptions in Appendix 3.
- Clarification was sought on the number of new positions within the proposed new College structure. The previously released organisational charts did not clearly distinguish between a new position, or previously existing but vacant position with a new title and refreshed position description. This has been corrected and updated organisational charts are included in Appendices 5-10. Vacant positions that are to be directly transferred have been more clearly identified in Part 4.
- Questions were raised regarding the accuracy of the "current state" organisational chart for the PSG and the representation of currently vacant professional staff positions. This was reviewed and updated during the consultation period and made available on the CECS Recovery webpage. The current state PSG organisational chart was made available on the FAQs and is included as part of Appendix 1.
- Minor corrections relating to individual circumstances, including corrections to the end-dates of fixed-term staff and current position titles.
- Remove "One (1) continuing academic position at Level E for Data Science and Analytics cluster" from the Managing Change Proposal.
- Requests to provide details on direct transfers as they relate to fixed-term staff. The
  Implementation Plan notes all fixed term roles will be transferred to the new structure for the
  current term of their employment.
- Concerns were raised that that there may have been a counting errors amongst PSG staff given the number of temporary arrangements in place. Figures for direct transfers and affected positions as outlined in this Implementation Plan have been cross-checked and are updated to be correct as of 9 November 2020.

# Part 3: Synopsis of the drivers for the change

As part of the ANU Recovery Plan 2020, the CECS Managing Change Proposal outlined a reorganisation to deliver the strategic objectives of the ANU and the College and make the necessary adjustments to reduce the College costs to operate within the budget confirmed in the 2020 ANU Recovery Plan. Specifically, CECS proposed a holistic restructuring of CECS with three broadly defined new schools and a transformed professional and support services. By reducing the organisational complexity and size, it



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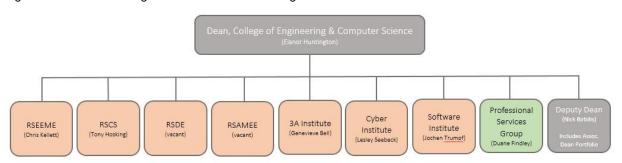
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will be possible to have a consistent and resourced focus. These changes will realign and focus the activities and staffing of the College to meet and deliver on institutional priorities and constraints.

The Reimagine Investment in CECS, approved by ANU Council in December 2018, was a response to a clear-eyed assessment of the growing importance of engineering and computing to Australia's future and the legacy of underinvestment in the area at ANU. Designed to unfold over 15 years, the \$350 million financial supplement was intended to strategically grow the faculty, strengthen the capacity for distinctive world-class teaching, research, and translation, and diversify the portfolio of activities and external engagements. In the first 18 months, the College was tracking to our budget forecasts and goals.

In line with the Reimagine business plan, the College had a very heterogeneous resource portfolio at the start of 2020. That included two large foundation schools (the Research School of Electrical, Energy and Materials Engineering—RSEEME—and the Research School of Computer Science—RSCS) and a large centralised administrative organisation (known as the Professional Services Group—PSG); two new, negligibly sized, schools (the Research School of Aerospace, Mechanical and Environmental Engineering—RSAMEE—and the Research School of Design Engineering—RSDE) that were due to commence significant growth in 2020-2021; and three innovation institutes (Autonomy Agency and Assurance Innovation Institute – 3Ai, Cyber Institute – CI and Software Innovation Institute – SII) which are explicitly scoped as start-up like entities of finite lifetime (see Figure 1). The current distribution of resources amongst the units within CECS is complex and uneven, and reflect a variety of histories, strategies, and legacy artefacts.

Figure 1: Present-state organisation chart of the College



CECS has experienced a significant reduction in the financial resources that would otherwise be used to underwrite transformation. With such significant financial headwinds, it is necessary to seek efficiencies—both within the College and across ANU—and focus resources on a smaller set of key strategic activities where the College can have a disproportionate impact. The university-wide focus of sustainable revenue models and the critical importance of teaching to our future requires a different format.

The organisational design, structure, and current scale of the College present holistic organisational and financial challenges in the face of disruption to student revenue streams and recurring education challenges in one of the foundation schools.

Explicit investments are needed within the College to complement and enhance university-level investments in priority activities. This all needs to be achieved while reducing recurrent expenditure by more than \$8 million compared to plans for 2020. This requires re-allocation of resources from existing activities, operating more efficiently, and choosing activities where we can excel at scale from a lower cost base.



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Figure 2: Financial summary of CECS

Consolidated Financials (Recurrent 'R' Funds	2017	2018	2019	2020 Budget***	2021	2022	2023
Only)	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Income	41,476	49,466	60,731	62,502			
Expenses	(31,613)	(38,282)	(47,114)	(66,147)			
Investments	3	9	(5)	-	-	-	-
Net operating result	9,863	11,184	13,612	(3,645)			
Business case income			49,396	54,945	61,372	69,137	77,557
Business case expense			(59,643)	(76,366)	(79,492)	(90,686)	(99,365)
Business case net operating result			(10,246)	(21,421)	(18,120)	(21,549)	(21,808)
Expenses* excluding transfers			44,369	61,580	53,350	53,350	53,350
Business Case expense excluding transfer**			(50,100)	(64,147)	(66,773)	(76,177)	(83,466)
Expenses vs business case			(5,731)	(2,567)	(13,423)	(22,827)	(30,116)

<sup>\*</sup> includes all accounts under CECS control

Figure 2 summarises the financial status of CECS. The row titles have been updated following feedback during the consultation period. There has been no change to the figures and the underlying calculations. Operating surpluses in 2017-19 have been due largely to academic staff numbers in computer science lagging behind significant increases in student numbers, as well as prudent management of strategic investments.

For CECS, the years 2020-2023 were intended to be those with the greatest University-led investment, as indicated in the Business case net operating result in Figure 2, to ramp up new areas and strengthen existing ones to achieve the goals of the approved Reimagine plans. Due to the impact of COVID-19, the College now has a revised 2020 recurrent budget allocation of \$55 million, and \$53.3 million in 2021. The gap between expenditure in 2021 and budgeted expenditure for 2020 is around \$8.2M. The gap between expenditure in 2021 and the Reimagine business case is around \$13M in 2021, growing to \$30M in 2023 (with a cumulative under-investment of \$65M compared to plans in the years 2021-23). The financial allocation to CECS comes with a set of high-level and exogenous constraints and expectations set by the financial implications of the ANU Recovery Plan, the ongoing commitment by the Vice-Chancellor and ANU Council to the agenda set by the Reimagine Investment, and the university's strategic investment in innovation institutes. Based on financial issues alone, it is not possible to contemplate proceeding as previously planned, or with only minor adjustments to those plans.

The Vice-Chancellor and ANU Council require a strategic response to the changed external environment so that the College remains aligned to the university strategic priorities. The task set for CECS is to achieve as much as possible of Reimagine, given significantly reduced resources and the changed external environment.

How the College achieves the remaining Reimagine objectives needs to change. This includes a reorganisation to deliver the strategic objectives of the ANU and the College and make the necessary adjustments to reduce costs to operate within the allocation confirmed in the 2020 ANU Financial Health Strategy, while also achieving the expectations as outlined there.

A holistic restructuring of CECS with three broadly defined new schools and a transformed PSG was proposed. By reducing the organisational complexity and breadth of activity, it will be possible to have a consistent and resourced focus. A three-school approach allows the College and its organisational units to manage resources in a more deliberative and concentrated way, as well as allowing a rationalisation and streamlining of support functions. Each School will be built on a model of focussed impact and outputs

<sup>\*\*</sup>estimate based on historic expenditure patterns of 13-16% transfers

<sup>\*\*\*</sup>budget as at start of 2020



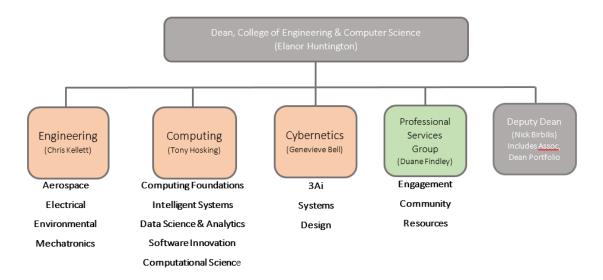
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across education, research, and engagement. These schools would be explicitly more than "research schools", and the staff profiles will reflect this change.

The three new Schools will each have a defined set of focus areas, or activity clusters—allowing for the concentration of resources and activities, and consequently increasing the potential for meaningful impact from a lower cost base (see Figure 3). The activity clusters for each School are described in Appendix 3. Following feedback during the consultation process, the name of one of the clusters has been changed; "Secure Software Systems" has been renamed as "Computing Foundations" and the FOR codes attached to it for the purposes of determining direct transfer of staff have been increased to include 0802. The descriptions of some clusters have been changed following feedback during the consultation process; and the accidental omission of the cluster description for "Software Innovation" has been corrected.

Figure 3. An activity cluster approach for the new Schools in the College



In addition to concentration of academic activity, the streamlined structure will mean that AOU-level support services can be consolidated and coordinated, leading to efficiencies of scale, improvements in level of local support and improved professional staff career paths throughout the College. Moving forward, a more structured and homogeneous distribution of total resources will be implemented, with a phased approach, starting with a short consolidation phase (2020-21), before a longer stabilisation period.

The anticipated 2025 end-state resembles the underlying intent of the Reimagine Investment, although in the new plan this takes shape in three schools, rather than four, and consolidates onto a smaller set of activities that have the potential to achieve ANU strategic objectives with the resources available.

# Part 4: Nature of the Change

The nature of the changes to CECS are to focus activities within the College into a smaller number of Academic Organisational Units (AOUs) and to streamline their activities. The new organisational structure for the College is included in Appendix 4.

The changes will disestablish each of the current school-level AOUs (Schools and Institutes), reorganise the Professional Services Group, and establish new Schools. The Innovation Institutes 3Ai and SII will be encapsulated within the new Schools, to preserve their hard-won capabilities and to inoculate the new Schools with embedded innovation activities.

The implementation of the new CECS structure and reorganisation will involve:

- The disestablishment of 7 AOUs (i.e. 4 Research Schools and 3 Institutes);
- The establishment of 3 AOUs (i.e. 3 Schools);
- The reorganisation of the College professional support services (including the Professional Services Group and Office of the Dean);



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- Development of a teach out plan for programs impacted by College, Research School and Institute changes:
- The direct transfer of one (1) Dean position;
- The direct transfer of one (1) Deputy Dean position;
- The direct transfer of three (3) AOU Directors with change of title;
- The direct transfer of forty-four (44) continuing academic positions (including vacant positions);
- The direct transfer of twenty-two (22) tenure track and ongoing position program academic positions:
- The direct transfer of sixteen (16) continuing (contingent funded) (CCF) academic positions;
- The direct transfer of one hundred and eighteen (118) fixed term academic positions;
- The direct transfer of seventy (70) continuing professional staff positions (including vacant positions);
- The direct transfer of nine (9) continuing (contingent funded) professional staff positions;
- The direct transfer of fifty-six (56) fixed term professional staff positions:
- Transition arrangements for affected staff including permanent transfer, redeployment, transition to a fixed term or fixed term pre-retirement agreement and voluntary separation;
- The disestablishment of up to eleven (11) continuing academic staff positions; and
- The disestablishment of up to five (5) continuing professional staff positions.
- Changes may also include a change in reporting or supervisory lines for some staff and
  positions; a change in work practices for some staff; refresh of academic and professional staff
  position descriptions; reorganisation of teams, and/or a change in conditions, including change
  that would be likely to lead to changed responsibility levels.

# **Summary of School and Institute changes**

Underpinning the redesign and reorganisation of the College is the intent to build coherent clusters of excellence in education, research, and engagement and establish critical mass and continuity sufficient to compete in those activities on the world stage. Each of the new Schools will encapsulate activities that already have some activity at that level in the College, but which need further strengthening to achieve impact.

Each of the new Schools - Computing, Engineering, and Cybernetics - will comprise a mix of early career academics (ECAs), mid-level career academics and academic leaders in their field. This is considered important to provide career development and succession planning, and to ensure the long-term success of each school across education, research and engagement.

Fixed term staff are important and valued members of the CECS community and the College has confirmed that fixed-term contracts will not be terminated early. This section relates to continuing staff positions.

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<sup>&</sup>lt;sup>1</sup> For the avoidance of doubt, the academic level will be taken at the census date of 8 October 2020.



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#### SCHOOL OF CYBERNETICS

The new structure for the School of Cybernetics is shown at Appendix 5.

The Academic profile of the new School will comprise a mix of early career academics (ECAs), mid-level career academics and academic leaders in their field. This is important to provide career development and succession planning and to ensure the long-term success of the School.

The School continuing academic staff profile will be the following:

- Two (2) continuing academic positions at Level A, level B or Level C within the 3Ai cluster;
- One (1) continuing Academic position at Level D or Level E within the 3Ai Institute cluster;
- One (1) continuing Academic position at Level C for Educational Experiences Lead;
- One (1) continuing Academic Level E for Systems Lead;
- One (1) continuing academic position at Level A, Level B or Level C within Systems cluster;
- One (1) continuing Academic Level E for Design Lead; and
- One (1) Distinguished Professor, Level E3.

#### **Directly Transferred Positions within the confirmed structure**

The following positions will be directly transferred from 3A Institute into the new School of Cybernetics structure. All of the positions to be directly transferred are being transferred at level (see Figure 5) and will have a position description review and refresh as part of the implementation of the changes.

- Distinguished Professor, level E3;
- All ANU Futures, ANU Entrepreneurial and ANU Translational Fellows academic positions;
- All Continuing Contingent Funded (CCF), Fixed term and Tenure Track academic positions;
- All 3A Institute continuing academic positions (including vacant positions); and
- All continuing and fixed term professional staff positions.

Any remaining vacant positions to be filled via standard recruitment processes as outlined in Staffing principles detailed in Part 5 below.

Figure 5: Continuing positions to be directly transferred to the new School of Cybernetics

Current Position Title	New Position Title	Number of positions
Director 3A Institute	Director, Cybernetics and 3Ai Institute	1
Professor (and Deputy Director)	Professor (and Deputy Director)	1
Fellow	Fellow	1
Fellow	Educational Experience Lead	1
Lecturer (VACANT)	Junior Academic (Level A/B/C)	2
Engagement & Impact Lead Manager	Engagement and Impact Lead	1
Institute Manager	Operational Excellence Lead	1
TOTAL		8

# New Positions within the confirmed structure

Listed below are the new continuing positions within the School of Cybernetics. Fixed term positions are not listed but are noted in the new organisational chart included in Appendix 5.

Strategic Services Lead, Senior Manager 2 OR Academic Level D or E (one position). This new position will be classified at SM2 or Academic D/E depending on the profile of the preferred candidate. This role will provide intellectual and managerial leadership for the School of Cybernetics to achieve the strategic objectives of establishing and maintaining a highly functional school. The key accountability and responsibilities for the role are:

1. Provide high level strategic planning and leadership to support the set up and operation of the school with a focus on building out the operational excellence, engagement and impact and education experience teams.



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- 2. Facilitate the design, implementation and iterative development of research, education and engagement directions, governance and business strategies in collaboration with the senior leadership team.
- 3. Lead and support School, College and ANU strategic initiatives and partnerships collaborating with a broad range of stakeholders.

Systems Lead, Academic Level E (one position). This new position will be classified at Academic Level E. This role will provide leadership to the Systems activity cluster, with a view to build on ANU's distinctive history as a centre for systems thinking, providing critical skills to industries and sectors working with complexity. The key accountability and responsibilities for the role are:

- 1. Support the establishment of innovative, interdisciplinary, outwardly-focused programs blending education, research and engagement;
- Support the development of partnerships with industry and engage with the wider research community to embed progressive engineering and computing research and education capabilities;
- 3. Contribute to the development of modern, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

<u>Design Lead, Academic Level E (one position).</u> This new position will be classified at Academic Level E. This role will provide leadership to the Design activity cluster, with a focus on identifying, articulating and growing a first of its kind design competency within the School of Cybernetics. The key accountability and responsibilities for the role are:

- 1. Support the establishment of innovative, interdisciplinary, outwardly-focused programs blending education, research and engagement;
- Support the development of partnerships with industry and engage with the wider research community to embed progressive engineering and computing research and education capabilities;
- 3. Contribute to development of modern, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

# Australian National University

# CHANGE IMPLEMENTATION PLAN

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#### SCHOOL OF COMPUTING

The new structure for the School of Computing is shown at Appendix 6.

The Academic profile of the new School will comprise a mix of early career academics (ECAs), mid-level career academics and academic leaders in their field. This is important to consider and support clusters within new Schools but also diversity and excellence, to provide career development and succession planning and to ensure the long-term success of the School.

The School continuing academic staff profile will be the following:

- One (1) continuing academic position at Level E for Director Computing;
- One (1) continuing academic position at Level E for Computing Foundations Lead;
- Two (2) continuing academic position at Level D for Computing Foundations cluster;
- One (1) continuing academic position at Level E2 for Computational Science Lead;
- One (1) continuing academic position at Level C for Computational Science cluster;
- Three (3) continuing academic position at Level E for Intelligent Systems cluster (including Lead);
- Two (2) continuing academic position at Level D for Intelligent Systems cluster;
- One (1) continuing academic position at Level C for Intelligent Systems cluster;
- One (1) continuing academic position at Level E for Data Science and Analytics (potential Lead);
- One (1) continuing academic position at Level C for Data Science and Analytics cluster; and
- One (1) continuing academic position at Level C for Education Lead

# **Directly Transferred Positions within the confirmed structure**

The following positions will be directly transferred into the new School of Computing structure (see Figure 6). All of the positions to be directly transferred are being transferred at level with eligibility criteria as outlined below and will have a position description review and refresh as part of the implementation of the changes.

For positions which do not otherwise meet another direct transfer category, eligibility criteria for transfer to a nominated cluster will be determined based on substantial (more than 50%) activity in cluster Field of Research (FoR) code determined by publications, grants and Excellence in Research Australia (ERA).

- Professor, Level E Director of Research School of Computer Science;
- Professor, Level E2;
- All ANU Futures, ANU Entrepreneurial and ANU Translational Fellows academic positions;
- All CCF, Fixed term and Tenure Track academic positions;
- ARC Future Fellow with >50% activity in FoR code 0801 and confirmed eligibility for direct transfer to Intelligent Systems cluster within new structure;
- Eligible continuing RSCS academics to Computing Foundations cluster if >50% activity in FoR codes 0803 or 0802 and where there are available at level positions in new structure;
- Eligible continuing RSCS and Software Innovation Institute academics to Data Science & Analytics cluster if >50% activity in FoR codes 0801 or 080604 and where there are available at level positions in new structure;
- Eligible continuing RSCS and RSEEME academics to Intelligent Systems cluster if >50% activity in FoR codes 0801 or 010303 and where there are available at level positions in new structure;
- Eligible continuing RSCS academics to Computational Science cluster if >50% activity in FoR codes 02 or 03 or 06 or 080301 and where there are available at level positions in new structure
- Where more eligible academic staff than at level positions in cluster an internal Expression of Interest and selection process will be required to fill available positions.
- Continuing and fixed term professional staff positions with at level position in new structure
- Any remaining vacant positions to be filled via standard recruitment processes as outlined in Staffing principles detailed in Part 5 below.



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Figure 6: Continuing Positions to be directly transferred to the new School of Computing

Current Position Title	New Academic cluster and/or Position Title	Number of positions
Director, RSCS (Level E)	Director, School of Computing	1
Professor (Level E2)	Computational Science Lead (Level E2)	1
Professor (Level E)	Computing Foundations Lead	1
ARC Fellow, with substantive	ARC Fellow, with substantive	1
Professor (Level E) position	Senior Academic (Level E)	
	position - Intelligent Systems	
Associate Professor (Level D) -	Senior Academic (Level D) -	1
RSEEME	Intelligent Systems	
Associate Professor (Level D)	Senior Academic (Level D) -	1
	Intelligent Systems	
Associate Professor (Level D)	Associate Professor (Level D) –	2
	Computing Foundations	
Fellow (Level C)	Junior Academic (Level C) - Data	1
	Science and Analytics	
Senior Lecturer (Level C)	Junior Academic (Level C) –	1
	Education Lead	
CS Futures Fellow, with	CS Futures Fellow, with	1
substantive Fellow (Level C)	substantive Junior Academic	
position	(Level C) position- Intelligent	
	Systems	
Senior Lecturer (Level C)	Junior Academic (Level C) -	1
	Computational Science	
School Manager	School Manager	1
Computer Science Educational	Educational Technologist	4
Technologist (VACANT)		
Assistant IT Manager	Computing Facilities Manager	1
(Professional Services Group)		
IT Teaching Support Officer	Teaching Computer Facilities	1
(Professional Services Group)	Support Technician	
Senior School Administrator	Senior School Administrator	1
Executive Assistant	Executive Assistant	1
School Administrator	School Administrator	2
TOTAL		23

# Direct transfer of positions to be confirmed through an Expression of Interest (EOI)

The following positions will be eligible for an EOI process for direct transfer to the new School structure. All of the eligible positions have an equivalent at level position within the new structure (see Figure 7).

Figure 7: Continuing Positions eligible for an EOI process in the new structure for the School of Computing.

Current Position Title/s	New Position Title	Number of positions
Professor (Level E) - RSCS / RSEEME	Senior Academic (Level E) – Intelligent Systems	2
Professor (Level E) - RSCS	Senior Academic (Level E) – Data Science & Analytics (potential Lead)	1
TOTAL		3



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#### New Positions within the confirmed structure

The following positions will be created within the new School of Computing.

<u>Engagement and Impact Lead, Senior Manager 1 (one position)</u>. This new position will be classified at Senior Manager 1. This role will identify and support engagement opportunities to promote the School's education and research portfolios. The key accountability and responsibilities for the role are:

- 1. Initiate, develop and nurture new industry and government partnerships;
- 2. Create and implement an engagement strategy for the School;
- 3. Develop processes and reviews to track the progress towards the School's engagement strategy.

Education Transformation Officer, ANU Officer Level 8 (one position). This new position will be classified at ANU Officer 8. This role will lead the education team to design, develop and implement high quality innovative technology-enhanced educational experience for the School. The key accountability and responsibilities for the role are:

- 1. Lead or contribute to program and course design and development teams to ensure innovative and high-quality education experiences;
- 2. Provide advice and support to staff in rethinking teaching practice and on the design, use and implementation of new methods;
- 3. Lead the School technical education team.

Research Computing Facilities Technician, ANU Officer Level 8 (one position) This new position will be classified at ANU Officer 8. This role will support the operation and development of the College's computing systems supporting research activities. The key accountability and responsibilities for the role are:

- 1. Provide advanced system administration across a range of platforms;
- 2. Support the operation and development of research computing facility systems and services;
- 3. Ensure the reliability, availability and serviceability of research computing facility systems.

#### Disestablished positions within the confirmed structure

The following positions will be disestablished as there are no available at level positions within the Academic profile of the School and the positions do not fit any of the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School.

<u>Level E – Three (3) positions</u> - these roles will be disestablished. There are no available at level positions within the Academic profile of the School and within the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School structure.

<u>Level D – Two (2) positions</u> - these roles will be disestablished. There are no available at level positions within the Academic profile of the School and within the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School structure.

<u>Level C – One (1) position</u> - this role will be disestablished. There are no available at level positions within the Academic profile of the School and within the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School structure.



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# **SCHOOL OF ENGINEERING**

The new structure for the School of Engineering is shown at Appendix 7.

The Academic profile of the new School will comprise a mix of early career academics (ECAs), mid-level career academics and academic leaders in their field. This is important to consider and support clusters within new Schools but also diversity and excellence, to provide career development and succession planning and to ensure the long-term success of the School.

The School continuing academic staff profile will be the following:

- One (1) continuing academic position at Level E for Director Engineering;
- One (1) continuing academic position at Level E for Aerospace Lead;
- One (1) continuing academic position at Level D for Aerospace cluster;
- One (1) continuing academic position at Level E for Electrical Lead;
- Two (2) continuing academic position at Level E for Electrical cluster;
- Four (4) continuing academic position at Level D for Electrical cluster;
- Two (2) continuing academic positions at Level B or C for Electrical cluster;
- One (1) continuing academic position at Level E for Mechatronics Lead;
- Two (2) continuing academic positions at Level D or E for Mechatronics cluster;
- One (1) continuing academic position at Level D or E for Environmental Lead;
- One (1) continuing academic position at Level D or E for Environmental cluster;
- One (1) continuing academic positions at Level B or C for Environmental cluster; and
- One (1) continuing academic position at Level E for Indigenous Environmental Engineering Design Studio.

# **Directly Transferred Positions within the new structure**

The following positions will be directly transferred into the new School of Engineering structure (see Figure 8). All of the positions to be directly transferred are being transferred at level with eligibility criteria as outlined below and will have a position description review and refresh as part of the implementation of the changes.

For positions which do not otherwise meet another direct transfer category, eligibility criteria for transfer to a nominated cluster will be determined based on substantial (more than 50%) activity in cluster FoR code determined by publications, grants and ERA.

- Professor, Level E Director of Research School of Engineering;
- All ANU Futures, ANU Entrepreneurial and ANU Translational Fellows academic positions;
- All CCF, Fixed term and Tenure Track academic positions;
- Continuing RSAMEE environmental engineering academics to be transferred to Environmental cluster:
- Continuing RSAMEE aerospace engineering academics to be transferred to Aerospace cluster;
- ARC Future Fellows with >50% activity in FoR code 0906 and confirmed eligibility for direct transfer to cluster within new structure;
- Eligible continuing RSEEME academics with >50% activity in FoR code 0906 and where there
  is available at level positions in the new structure in Electrical cluster;
- Eligible continuing RSEEME academics with >50% activity in FoR code 0906 plus teaching
  experience in Mechatronics major and where there is available at level positions in the new
  structure in Mechatronics cluster;
- Continuing and fixed term professional staff positions with at level position in new structure; and
- Any remaining vacant positions to be filled via standard recruitment processes as outlined in Staffing principles detailed in Part 5 below.



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Figure 8: Continuing Positions to be directly transferred to the new School of Engineering

Current Position Title	New Position Title	Number of positions
Director, RSEEME (Level E)	Director, School of Engineering (Level E) -	1
Professor (Level E) - RSAMEE	Aerospace Lead (Level E) - Aerospace	1
Professor (Level E) - RSEEME	Electrical Theme Lead (Level E) [Theme Lead to be determined during implementation phase]	1
Professor (Level E) - RSEEME <sup>2</sup>	Mechatronics Theme Lead (Level E) [Theme Lead to be determined during implementation phase]	1
Professor (Level E) - RSEEME	Senior Academic (Level E) - Mechatronics	1
Associate/Professor (Level D or E) (VACANT)	Environmental Theme Lead (Level D or E)	1
Professor (Level E) – RSAMEE (VACANT)	Indigenous Environmental Engineering Design Studio	1
Professor (Level E) - RSEEME	Senior Academic (Level E) – Electrical	2
Associate Professor (Level D) - RSEEME	Senior Academic (Level D) - Aerospace	1
Associate Professor (Level D) - RSEEME	Senior Academic (Level D) - Electrical	3
ARC Fellow, with substantive Associate Professor (Level D) position - RSEEME	ARC Fellow, with substantive Associate Professor (Level D) position - Electrical	1
Head, Battery Storage Grid IP (Level D) - RSAMEE	Senior Academic (Level D) - Environmental	1
Director, Software Innovation Institute (Level D) - SII	Senior Academic (Level D) - Mechatronics	1
DECRA Fellow, with substantive Fellow (Level C) position - RSEEME	DECRA Fellow, with substantive Fellow (Level C) position - Electrical	1
Fellow (Level C) - RSEEME	Junior Academic (Level C) - Electrical	1
Senior Lecturer (Level C) - RSAMEE	Junior Academic (Level C) - Environmental	1
Technical Services Manager	Technical Services Manager	1
Electronics Technician	Electrical Lead	1
Laboratory Manager	Laboratory Manager	1
SUBSTANTIVE Project Officer Mechanical & Materials Tech	Educational Systems Officer  Mechanical Lead	1
Technical Officer	Technical Officer	3
WHS Officer (VACANT)	WHS Consultant	1
Executive Assistant	Executive Assistant	1
Senior School Administrator	Office Coordinator	1
School Administrator	Administration Officer	2
Electronics Technician	Technician	1
Technical Maintenance Ops	Technician	1
Officer TOTAL		34
IOIAL		JT

<sup>&</sup>lt;sup>2</sup> A current recruitment process has been finalised subsequent to issuing the Managing Change Proposal.



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#### **New Positions within the confirmed structure**

The following positions will be created within the new School of Engineering.

<u>School Manager, Senior Manager 2 (one position)</u>. This new position will be classified as a Senior Manager 2 Position. This new role will have an increased responsibility and scope to support the operational requirements and professional and technical services needed to support the new School. The key accountability and responsibilities for the role are:

- 1. Provide high level strategic planning and leadership to support the strategic priorities and ongoing operation of the School;
- 2. Develop and manage the WHS, School Administration and Technical Support portfolios within the School:
- 3. Facilitate the design, implementation and iterative development of research, education and engagement directions, governance and business strategies in collaboration with the senior leadership team.

WHS Manager, ANU Officer Grade 8 (Administration) (one position). This new position will be classified at ANU Officer Grade 8 (Administration). This role will be responsible for the management, implementation and ongoing oversight of WHS matters within the College. The key accountability and responsibilities for the role are:

- 1. Establish a WHS framework in line with the University's WHS systems and requirements;
- 2. Lead and manage the implementation of ANU policies and procedures;
- 3. Provide technical expertise and direction on all aspects of WHS as it relates to the College.

# Materials Engineering Fellowship Positions unable to be transferred to new School

There are currently two (2) Level E positions and one (1) Level D position within the School which have externally funded Fellowships with a materials engineering research and education focus. As the changes for the College and the School include a move away from materials engineering, these positions are unable to be directly transferred to the new structure.

The College recognises and acknowledges the work undertaken by these Fellowships is important and that the materials engineering research and education activities undertaken within these roles have some alignment with activities in other Colleges and Research Schools at the University. The College is working with these individual staff members and colleagues across the University to determine if their roles can be transferred to other Research Schools in alignment with strategic priorities and expertise in those Colleges and Schools.

During the consultation period, multiple representations were received indicating that the Level D externally funded Fellow who had been identified as not being aligned to an identified Activity Cluster, should be considered as eligible for the Electrical Engineering cluster. As a result of this feedback, it has been confirmed that eligibility for the Externally Funded Fellow position to be allocated to the Electrical Engineering Cluster will be considered by the Expert Panel as part of the outlined process for Activity Cluster allocation. Should the Expert Panel determine eligibility for the Electrical Engineering Cluster, a Level D position will be created in the Electrical Engineering Cluster within the Research School of Engineering for this Fellow. In the event the Expert Panel does not confirm this Fellow as aligned to the proposed Electrical Engineering Cluster, as outlined above, the College will continue to work with this individual staff member to determine if the role can be transferred to other Research Schools at the University

#### Disestablished positions within the new structure

Academic Positions

The following academic positions will be disestablished as there are no available at level positions within the Academic profile of the School and the positions do not fit any of the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School.

<u>Level E - 3 (three) positions</u>. These roles will be disestablished. There are no available at level positions within the Academic profile of the School and within the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School structure.



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<u>Level D – 1 (one) position.</u> This role will be disestablished. There are no available at level positions within the Academic profile of the School and within the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School structure.

<u>Level C - 1 (one) position</u>. This role will be disestablished. There are no available at level positions within the Academic profile of the School and within the eligibility criteria that would enable them to be directly transferred to any of the available positions within the new School structure.

# Professional Staff Positions

The following position will be disestablished as it is no longer required or the duties have been or will be ceased or distributed elsewhere within the new School.

<u>School Manager</u>, <u>Senior Manager 1 (Administration) – (one position)</u>. This role will be disestablished. The new structure requires an expanded role and scope of responsibility for the School Manager. The School Manager role will be redesigned and expanded and have requirement for specific operational and technical experience. The work associated to this position will be included in the new expanded School Manager role and as part of the implementation of the changes to the School of Engineering.



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#### OFFICE OF THE DEAN AND PROFESSIONAL SERVICES GROUP

The Office of the Dean will include four positions and the new service model for the PSG will include 48 continuing positions. The new structure for the Office of the Dean and Professional Services Group is provided in Appendices 8 and 9.

Expression of Interest processes will used to support identification of the direct transfer of at level positions for affected staff when a position has been unable to be otherwise directly transferred to the new Office of the Dean and PSG teams.

Roles which do not result in an appointment and vacant positions will be subject to internal (ANU wide) and external recruitment and formal selection processes.

All other new or vacant positions, not subject to an EOI process for affected staff, will be subject to external recruitment processes.

#### **Directly Transferred Positions within the new structure**

The following positions will be directly transferred into the new structure. All of the positions to be directly transferred are being transferred at level and will have a position description review and refresh as part of the implementation of the changes. This will enable the positions to be updated and aligned with the requirements of the new structure and ensure the positions are focused on the required capacity to deliver on the administration requirements of the College.

All fixed term roles will be directly transferred to the new structure for the current term of their appointment.

Figure 10: Continuing positions to be directly transferred to the new Office of the Dean and PSG structure

Current Position Title	New Position Title	Number of positions
Dean CECS	Dean	1
Associate Dean (Education) <sup>3</sup>	Associate Dean (Education)	1
Associate Dean (Engagement) (VACANT)	Associate Dean (Engagement)	1
Associate Dean (Community & Inclusion) (VACANT)	Associate Dean (Community)	1
General Manager (VACANT)	General Manager	1
Executive Officer (VACANT)	Executive Officer	1
Office Manager	Office Manager	1
Project Officer (VACANT)	Project Officer	1
Advancement Office Administrator	Advancement Officer	1
Student Services Manager (VACANT)	Service Manager (Academic Services)	1
Team Leader	Senior Service Consultant - Student Services	1
Senior Project Officer D&I	Senior Service Consultant - D&I	1
ANU Officer Level 8 (Admin)	Senior Service Consultant - Student Services, Employability and Experience	1
Education Governance Officer	Service Coordinator - Academic Services	1
Education Governance Officer	Service Coordinator - Student Services, Employability and Experience	2
Sr Coursework Coordinator	Service Coordinator - Student Services, Employability and Experience	2
Grad Admission & Student Admin	Service Coordinator- Student Services, Employability and Experience	1

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<sup>&</sup>lt;sup>3</sup> A current recruitment process has been finalised subsequent to issuing the Managing Change Proposal



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Current Position Title	New Position Title	Number of positions
Deputy Manager RIO	Senior Service Consultant - Industry and Grants	1
Research Services Coordinator	Service Coordinator - Industry and Grants	1
Business Development Officer	Service Coordinator – Industry and Grants	1
Marketing & Comms Senior Officer	Service Coordinator - Marketing and Communications	1
Marketing Recruitment Officer	Service Coordinator - Marketing and Communications	1
HR Manager (VACANT)	Service Manager – Human Resources	1
Deputy HR Manager	Senior Service Consultant - Human Resources	1
Finance Manager (VACANT)	Service Manager – Finance	1
Senior Finance Officer	Service Coordinator - Finance	2
Senior Manager 1 (Admin)	To be confirmed – substantive incumbent currently on temporary transfer	1
ANU Officer Grade 6/7 (Admin)	To be confirmed – substantive incumbent currently on temporary transfer	1
TOTAL		31

# Direct transfer of positions to be confirmed through an Expression of Interest (EOI)

The following positions will be eligible for an EOI process in the new structure (see Figure 11). All of the eligible positions have an equivalent at level position within the new structure.

Figure 11: Continuing Positions eligible for an EOI process in the new structure for the Office of the Dean and Professional Services Group.

Classification	Position Title	Number of positions
ANU Officer 8	Senior Service Consultant – Industry and Grants Senior Service Consultant – Marketing and Comms Senior Service Consultant – Academic Services Senior Service Consultant – Assets Senior Service Consultant - Finance	5
ANU Officer 6/7	Service Coordinator – Industry and Grants (3 positions) Service Coordinator – Marketing and Comms Service Coordinator – Student Services Service Coordinator – HR	6
ANU Officer 5	Service Officer – Industry and Grants (2 positions) Service Officer – Marketing and Comms Service Officer – Academic Services Service Officer – Student Services (2 positions) Service Officer – HR	7
TOTAL		18

# New Positions within the Office of the Dean and PSG

The following positions will be created within the new structure. Positions are recommended to ensure that suitably qualified and experiences staff have the skills qualifications and attribute to improve subject matter expertise to optimise the delivery of and outcome of administration support for the Research School, College and the University.



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Service Leader (Engagement / Community / Resources), Senior Manager 2 (SM2) (three positions). These positions will be classified at SM2. The Service Leader roles will lead and develop the College's Engagement, Community and Resources functions, championing the service focus and providing strategic advice, management and leadership. The key accountability and responsibilities for the roles are:

- 1. Lead coach and develop their people to create high performing teams;
- 2. Ensure the delivery of excellent engagement outcomes to clients and stakeholders, advancing the College's and University's overall capability and strategic goals;
- 3. Build strong and collegial relationships with the College community and wider University.

<u>Senior Service Consultant (Industry and Grants)</u>, <u>ANU Officer Level 8 (one position)</u>. This position will be classified at ANU Officer 8. This role provides high level support and advice on all industry, government and non-research related opportunities including the coordination of projects. The key accountability and responsibilities for the role are:

- Initiate, develop and nurture new and existing industry and/or commercial projects and consultancies;
- 2. Provide effective supervision to the service team members;
- 3. Coordinate provision of responsive and expert advice to the College community.

<u>Service Manager – Student Services, Employability & Experience, Senior Manager 1 (SM1) (one position) -</u> This position will be classified at SM1. The role will act as the principal advisor to senior management and the College community on all student services, employability and experience related aspects, providing high level, strategic student administration advice, guidance and support. The key accountability and responsibilities for the role are:

- 1. Provide effective leadership, management and engagement to the Student Services, Employability and Experience team;
- 2. Ensure proactive, strategic and expert advice is provided to the College leadership group and broader community;
- 3. Support the development and implementation of strategic plans.

<u>Service Manager (Assets), Senior Manager 1 (SM1) (one position)</u> - This position will be classified at SM1. The role will act as the principal advisor to senior management and College community on Asset related (physical and digital) aspects, providing high-level, strategic student administration advice, guidance and support. The key accountability and responsibilities for the role are:

- 1. Provide effective leadership, management and engagement to the Assets team;
- 2. Ensure proactive, strategic and expert advice is provided to the College leadership group and broader community;
- 3. Support the development implementation of strategic plans.

Senior Service Consultant (Academic Services), ANU Officer Level 8 (one position). This position will be classified at ANU Officer 8. This role will provide high level support and advice to the Service Manager on all education policy, governance and curriculum related aspects, including the development, design and implementation of education governance and management practices. The key accountability and responsibilities for the role are:

- 1. Provide effective supervision to the service team members;
- 2. Lead and manage the provision of academic services support operations;
- 3. Coordinate the provision of responsive and expert advice to the College community.

<u>Senior Service Consultant (Assets), ANU Officer Level 8 (one position).</u> This new position will be classified at ANU Officer 8. This role will assist the Service Manager in the management of complex asset issues and in the delivery of high quality, robust and flexible services to College community. The key accountability and responsibilities for the role are:

- 1. Coordinate the provision of responsive and expert advice to the College community;
- 2. Lead and manage the College's physical and digital asset operations including Dev Ops;
- 3. Prepare strategic report and analytics, investigating issues and providing insightful recommendations.



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# Disestablished positions within the Office of the Dean and PSG structure

The Professional Service Group (PSG) within the College will be pivoted to a service orientated approach and it is expected there will be a reduction of up to 5 continuing professional staff positions once all direct transfers and EOI processes are completed.

# **SUMMARY OF CONFIRMED ACADEMIC PROGRAM CHANGES**

Current students in discontinued programs or majors will be supported and have pathways to completion. Teach-out plans will be developed to ensure that students can satisfy the requirements for their programs and not be delayed in their progression. In any teach-out plans, some courses may be substituted in program requirements to enable completion for students where individual courses themselves are disestablished, but every effort will be made to substitute like for like. Accreditation of programs will be unaffected and all changes are subject to standard ANU educational governance oversight.

Analysis and consideration of all current educational programs within the College has been undertaken and the program impact of the changes are noted below:

Programs which will continue to be offered within the new College structure:

- Bachelor of Information Technology (BIT) (plus Honours)
- Bachelor of Advanced Computing (Honours) (and R&D)
- Bachelor of Advanced Computing (BAC) (and R&D)
- Bachelor of Applied Data Analytics (BADA) (plus Honours)
- Bachelor of Engineering (Honours) (and R&D)
- Diploma of Computing
- Doctor of Philosophy
- Graduate Certificate of Applied Data Analytics (GCADA)
- Graduate Certificate of Data Engineering (GCDE)
- Graduate Certificate of Machine Learning and Computer Vision (GCMLCV)
- Graduate Diploma of Applied Cybernetics (GDAC)
- Graduate Diploma of Applied Data Analytics (GDADA)
- Graduate Diploma of Computing (GDCOMP)
- Master of Applied Cybernetics (MAC)
- Master of Applied Data Analytics (MADA)
- Master of Computing (MCOMP) (and Advanced)
- Master of Engineering in Electrical Engineering (MEEE)
- Master of Engineering in Mechatronics (MMECH)
- Master of Engineering in Renewable Energy (MERE)
- Master of Machine Learning and Computer Vision (MMLCV)
- Master of Philosophy (MPHIL)

Programs which will cease to be offered within the new College structure and will require teach out arrangements:

- Bachelor of Software Engineering (Honours) (BSENG)
- Master of Engineering in Digital Systems and Telecommunications (MEDST)
- Master of Engineering in Photonics (MPHOTO)
- Bachelor of Engineering (Honours) (and R&D) stream Biomedical Systems major and minor
- Bachelor of Engineering (Honours) (and R&D) stream Mechanical and Material Systems major and minor
- Bachelor of Engineering (Honours) (and R&D) stream Photonics Systems major and minor
- No other majors and minors in the Bachelor of Engineering (Honours) (and R&D) stream affected

During consultation, sweeping changes were suggested to the ANU Computing Curriculum. Those proposals will be included in the consultation process for the BSENG in 2021.

# **Teach Out Plan**

Current students in discontinued programs or majors will be supported and have pathways to completion. Teach-out plans will be developed to ensure that students can satisfy the requirements for their programs and not be delayed in their progression. In any teach-out plans, some courses may be substituted in



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program requirements to enable completion for students where individual courses themselves are disestablished, but every effort will be made to substitute like for like. Accreditation of programs will be unaffected and all changes are subject to standard ANU educational governance oversight.

A teach-out plan for all affected programs, majors, and minors will be developed by the College in consultation with the Deputy Vice Chancellor (Academic), the Dean, the Associate Dean (Education), the relevant School Directors and (as applicable) the Associate Director (Education).

The plan will detail a timetable for each of the impacted programs and delivery of associated courses and confirm teach out enrolment conditions. It is expected this will include confirmation of no new enrolments in the BSENG from the end of 2020 and enrolments in all other programs within the confirmed teach out plan to be limited to students undertaking impacted programs as part of existing program plan arrangements.

It is expected that any teach-out program will run until at least the end of 2022 and will require academic support from a mix of full time, part time and fixed term academic appointments, and, possibly a range of casual sessional academic staff.

Following confirmation of this teach-out program and approval by the University Academic Board, this program will be communicated to all affected students.

#### Consideration of coursework students

Where transitional arrangements for College programs are required as a result of this change process, the following process will be followed:

- Where a current student wishes to transfer to an alternative program offered by the College, the
  necessary arrangements will be put in place by the College to assist the student making an
  application to transfer. Students wishing to transfer will still need to meet minimum program
  admission requirements;
- Where a current student wishes to transfer their studies to an alternate program at another University, the College will support and, as appropriate, assist the student to make the necessary arrangements to facilitate this transfer; and
- Where a current student wishes to cease their studies before completing the full program, the College will assist the student to make the necessary arrangements to cease their enrolment.

Each student will be offered personalised advice on options by the College and support with any administrative actions required in order to meet the individual needs and circumstances of each student.

# **Consideration of HDR Students**

Where transitional arrangements for supervision of HDR students are required as a result of the College reorganisation, the following process will be followed:

- If a current HDR student's principal supervisor or another member of their supervision panel is not appointed to a role in the new College structure, the student will be advised in person by the Associate Dean (HDR) and the Dean (HDR) before as soon as practicable;
- As part of discussions with affected staff members, they will be asked if they wish to continue their supervision arrangements with any current or intending HDR students for whom they are responsible. If so, the Associate Dean (HDR) will consult with the student(s) and confirm that the student(s) wish to continue with this supervisor. In this case, the College will work with the student to make the necessary arrangements.
- Consideration will be given to arranging ongoing associations or affiliations, in accordance with the University's Conferral of Academic Title Policy and procedure, for staff who may be leaving the University but wish to continue their supervisory arrangements:
- Where the principal supervisor chooses not to affiliate with the University, the Associate Dean (HDR), in cooperation with academic staff in the new Schools and the College, will make recommendations to the student about suitable academic staff within the University who could assume the principal supervisor's role. No appointment of a new principal supervisor will be made without full consultation with the student and without the student's express agreement.
- If a suitable principal supervisor or other panel members cannot be identified within the University, the Associate Dean (HDR) will work with the student and with staff in the new Schools and the



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College to identify a suitable replacement from within the disciplinary network of universities in Australia and internationally. In this situation, the costs of securing substantive supervision from an external academic will be covered by the University.

Any intending HDR students not currently enrolled but who may be identified as being impacted
by the changes will have all the principles above apply to them with any appropriate modifications
subject to their circumstances.

# Impact on and Management of Research Grants

Research grants held and being delivered by any staff member who does not transition to the new College structure will be managed on a case by case basis. This will be in consultation with the staff member and the granting body and in the same manner and with the same principles that apply to the handling of research grants when a staff member leaves the ANU for any circumstance, including employment at another organisation.

# **Part 5: Staffing Principles**

The transition to the new College structure will be via the following steps and staffing principles. Any reductions in staffing are managed in accordance with the job security provisions outlined in clause 67 of the ANU Enterprise Agreement 2017-2021 (ANU Enterprise Agreement).

In accordance with Clause 67 of the ANU Enterprise Agreement, any staff reductions within the College will be managed and achieved through the following principles:

- natural attrition;
- permanent transfer;
- redeployment;
- voluntary conversion to part-time work;
- · fixed term pre-retirement agreements; or
- voluntary separation.

#### **ACADEMIC STAFF: STAFFING PRINCIPLES**

The following principles will apply in determining academic staff position changes and direct transfers to the new Schools:

#### Where eligibility for transfer to new School cluster cannot be determined

For positions which do not otherwise meet another direct transfer category, eligibility criteria for transfer to a nominated cluster will be determined based on substantial (more than 50%) activity in cluster FoR code determined by publications, grants and ERA. If >50% eligibility criteria required for direct transfer to new School and cluster cannot be confirmed, it will be determined by expert panel which will include nominees from within the College, the University and from external experts as appropriate. The Information to be considered will include:

- Primary FoR code (if available) with more than 50% in cluster FoR code;
- Three (3) years publication data confirming FoR;
- Current research grants;
- HDR Supervision;
- Teaching program/s; and
- Service (University and Industry),

If eligibility for direct transfer to a cluster is confirmed and if there is available at level positions in the new structure, a direct transfer will be confirmed.

Where there are more eligible academic staff than at level positions in a cluster an internal Expression of Interest and selection process will be required to fill available positions.



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# Expression of Interest (EOI) process: Where there are more eligible academic staff than available positions

Where more eligible academic staff than at level positions in cluster an internal Expression of Interest (EOI) process will be required to fill the available positions. There may be vacant academic positions which will be created and available within the new Schools. Affected CECS staff will be provided the opportunity to lodge applications through an EOI process for (at level) positions. A selection process will be undertaken based on the standard recruitment process of assessing applicants against the selection criteria for the roles. This selection process will include a formal selection panel and interviews may be held for short listed candidates.

If EOI processes do not result in appointments, vacant positions will be subject to internal (ANU wide) and external recruitment and formal selection processes.

#### New or vacant academic positions

There may be vacant academic positions which will be created and available within the new Schools. Formal selection processes will be undertaken based on the standard internal (ANU-wide) and/or external recruitment process of assessing applicants against the selection criteria for the roles. These selection processes will include a formal selection panel and interviews may be held for short listed candidates.

# Phase 1- Management of Staff Requests

Consult with all affected staff for all possible options, in accordance with clauses 67 and 68 of the ANU Enterprise Agreement

#### Phase 2 – Notification of Disestablishment of Positions & Redeployment

Affected staff will be advised in accordance with subclauses 56.5 and 68.19-68.20 of the ANU Enterprise Agreement that their substantive position is surplus to requirements. The formal redeployment processes under clauses 56.7 to 56.13 of the ANU Enterprise Agreement will apply.

Staff whose positions have been identified as surplus will be formally advised in writing. Action will be taken to identify suitable alternate positions for such staff - or the staff member may seek approval for an early separation. In such a case, they will be paid the balance of the 12-week redeployment period.

In accordance with clause 56.8 of the ANU Enterprise Agreement, a suitable alternative position means a position which has substantially the same duties, classification level and career standing as the redundant position and for which the staff member currently possesses the skills and experience (or could reasonably be expected to develop the required skills within a limited period) to satisfactorily perform the duties of the position.

If the process of identifying suitable positions results in more than one staff member being interested in the position then a selection process will be undertaken for the role based on a standard appointment process. The assessment will be against the selection criteria for the role. The selection process will be that applicable to a standard appointment process with a formal selection panel formed and assessments made against the position selection criteria.

In accordance with the ANU Enterprise Agreement the staff member that best meets the selection criteria for the position, or could be expected to meet the selection criteria with appropriate training within a reasonable timeframe, will be appointed to the position.

#### Phase 3 - Notice of termination due to Redundancy

Following the 12 week redeployment period, where the staff member cannot be redeployed, in accordance with clause 56.14 of the ANU Enterprise Agreement the University will notify the affected staff member(s) in writing that his or her position is to be declared redundant and his or her employment may be terminated; the reason for the redundancy; and the timeline for this action.

This notification advice will also provide the staff member with at least 6 weeks formal notice in accordance with clause 56.15 of the ANU Enterprise Agreement that their employment is to be terminated due to redundancy from a specified date. At the discretion of the University payment in lieu of notice may be provided.



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The following termination payments will apply to staff made redundant:

- For Academic staff a redundancy payment of 3 weeks' salary for each year of service with a minimum payment of 5 weeks' pay and maximum of 68 weeks' pay;
- Academic Employment Transition Payment of up to 16 weeks salary for academic staff, provided the total redundancy payment for academic staff does not exceed 78 weeks (excluding accrued annual and long service leave); and
- Payment of accrued annual leave and, if eligible, long service leave.

#### PROFESSIONAL STAFF: STAFFING PRINCIPLES

The following principles will apply in determining professional staff position changes:

# Phase 1 - Management of Staff Requests

Consult with all affected staff for all possible options, in accordance with clauses 67 and 68 of the ANU Enterprise Agreement

# Phase 2 – Recruitment and Appointment Process

Finalise position descriptions for positions. Recruitment for vacant and new positions will commence once position descriptions have been reviewed and approved by the University Staffing Committee.

Once position descriptions are finalised, direct transfers will be confirmed where possible and staff identified to have a change in position title, description or supervisor will be provided with revised position descriptions and written notification of any supervision changes.

An Expression of Interest (EOI) process will then be conducted for newly established and vacant positions with affected staff provided the opportunity to lodge applications through an EOI process for (at level) identified positions within the new structure. A selection process will be undertaken based on the standard recruitment process of assessing applicants against the selection criteria for the role. This selection process will include a formal selection panel and interviews may be held for short listed candidates.

If EOI processes do not result in an appointment, vacant positions will be subject to internal (ANU wide) and external recruitment and formal selection processes.

All other new or vacant positions, not subject to an EOI process for affected staff, will be subject to internal (ANU wide) and external recruitment processes.

It is expected that the recruitment processes may take up to 2 months to finalise. Temporary appointments may be made to these positions on an as-needs basis during this period to ensure continuity of service delivery.

#### Phase 3 - Notification of Disestablishment of Positions & Redeployment

Affected staff will be advised in accordance with subclauses 56.5 and 68.19-68.20 of the ANU Enterprise Agreement that their substantive position is surplus to requirements. The formal redeployment processes under clauses 56.7 to 56.13 of the ANU Enterprise Agreement will apply.

Staff whose positions have been identified as surplus will be formally advised in writing. Action will be taken to identify suitable alternate positions for such staff - or the staff member may seek approval for an early separation. In such a case, they will be paid the balance of the 12-week redeployment period.

In accordance with clause 56.8 of the ANU Enterprise Agreement, a suitable alternative position means a position which has substantially the same duties, classification level and career standing as the redundant position and for which the staff member currently possesses the skills and experience (or could reasonably be expected to develop the required skills within a limited period) to satisfactorily perform the duties of the position.

If the process of identifying suitable positions results in more than one staff member being interested in the position then a selection process will be undertaken for the role based on a standard appointment process. The assessment will be against the selection criteria for the role. The selection process will be



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that applicable to a standard appointment process with a formal selection panel formed and assessments made against the position selection criteria.

In accordance with the ANU Enterprise Agreement the staff member that best meets the selection criteria for the position, or could be expected to meet the selection criteria with appropriate training within a reasonable timeframe, will be appointed to the position.

# Phase 4 - Notice of Termination Due to Redundancy

Following the 12 week redeployment period, where the staff member cannot be redeployed, in accordance with clause 56.14 of the ANU Enterprise Agreement the University will notify the affected staff member(s) in writing that their position is to be declared redundant and his or her employment may be terminated; the reason for the redundancy; and the time line for this action.

This notification advice will also provide the staff member with at least six weeks' formal notice in accordance with clause 56.15 of the ANU Enterprise Agreement that their employment is to be terminated due to redundancy from a specified date. At the discretion of the University, payment in lieu of notice may be provided. The following termination payments will apply to professional staff whose positions are made redundant:

- A redundancy payment of three weeks' salary for each year of service with a minimum payment of five weeks' pay and maximum of 64 weeks' pay; and
- Payment of accrued annual leave and long service leave.

# Part 6: The University's Commitment

#### Status:

Following the release of the formal Change Management Proposal on Thursday 15 October 2020, and the conclusion of the formal consultation period on Friday 30 October 2020, the University has prepared this Change Management Implementation Plan to confirm the process for progressing workplace change relating to the ANU College of Engineering and Computer Science.

The implementation of the new CECS structure and reorganisation will involve:

- The disestablishment of 7 AOUs (i.e. 4 Research Schools and 3 Institutes);
- The establishment of 3 AOUs (i.e. 3 Schools);
- The reorganisation of the College professional support services (including the Professional Services Group and Office of the Dean);
- Development of a teach out plan for programs impacted by College, Research School and Institute changes;
- The direct transfer of one (1) Dean position;
- The direct transfer of one (1) Deputy Dean position;
- The direct transfer of three (3) AOU Directors with change of title;
- The direct transfer of forty-four (44) continuing academic positions (including vacant positions);
- The direct transfer of twenty-two (22) tenure track and ongoing position program academic positions;
- The direct transfer of sixteen (16) continuing (contingent funded) (CCF) academic positions;
- The direct transfer of one hundred and eighteen (118) fixed term academic positions;
- The direct transfer of seventy (70) continuing professional staff positions (including vacant positions);
- The direct transfer of nine (9) continuing (contingent funded) professional staff positions;
- The direct transfer of fifty-six (56) fixed term professional staff positions;
- Transition arrangements for affected staff including permanent transfer, redeployment, transition to a fixed term or fixed term pre-retirement agreement and voluntary separation;
- The disestablishment of up to eleven (11) continuing academic staff positions; and
- The disestablishment of up to five (5) continuing professional staff positions.

  Changes may also include a change in reporting or supervisory lines for some staff and positions; a change in work practices for some staff; refresh of academic and professional staff position descriptions; reorganisation of teams, and/or a change in conditions, including change that would be likely to lead to changed responsibility levels.



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Staff redundancies, if unavoidable, will be subject to the University's redundancy provisions.

#### **Notification:**

The University is has prepared this document to set out its specific organisational changes and arrangements and the implementation process for your information and it is being circulated to:

- ANU College of Engineering and Computer Science staff and students;
- ANU College of Engineering and Computer Science Honorary appointees;
- ANU Executive;
- College Deans, Research School Directors, Service Division Directors, General Managers and School Managers;
- Available via the ANU Recovery website here
- Nominated staff representatives including the NTEU;
- ANUSA;
- PARSA; and
- Other relevant stakeholders as required.

#### Representation:

Throughout this process staff members may be represented, and seek advice or assistance at any time from a person of their choice as outlined in the ANU Staff Representation Procedure which may be accessed via this link <a href="http://policies.anu.edu.au/procedures/staff\_representation\_procedure/procedure">http://policies.anu.edu.au/procedures/staff\_representation\_procedure/procedure</a> Staff may not request representation by a legal practitioner unless they are directly involved in a formal disciplinary or termination of employment processes.

# **Part 7: Implementation Timetable**

The University has set out the below timetable to meet and confer with the staff members concerned (and their chosen representatives). The University endeavours to reach agreement about the implementation of change and to work consultatively with people affected by change.

Date	Details of Implementation	
15 October 2020	Release of Change Management Proposal	
15-30 October 2020	Consultation period	
11 November 2020	Implementation Plan released	
11-13 November 2020	Feedback on implementation plan	
w/c 16 November 2020	Implementation commences	
w/c 16 November 2020 - w/c 14 December 2020	<ul> <li>Meetings with directly affected staff regarding options and preferences</li> <li>Expression of interest processes to ascertain direct transfers</li> <li>Confirmation of direct transfers</li> <li>Individual meetings with directly affected HDR students, including discussions regarding individual options</li> </ul>	
w/c 11 Jan 2021	<ul><li>Commence staged recruitment for vacant and new positions</li><li>Commence staff transition to new structure</li></ul>	
w/c 11 Jan 2021 -31 March 2021	<ul> <li>Staff transition period, including "PSG transition"</li> <li>Individual meetings with directly affected HDR students, including discussions regarding individual options</li> </ul>	



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31 March 2021	Expected completion of implementation and
	transition to new College structure

# **Contacts**

The implementation of the changes for the College will be led by Professor Elanor Huntington, Dean, ANU College of Engineering and Computer Science in consultation with the Human Resources Division.

Name	Position	Contact details
Professor Elanor Huntington	Dean ANU CECS	dean.cecs@anu.edu.au ph:(02) 6125 8807
PSG (incl OOD) and all CECS: Professor Nick Birbilis	Deputy Dean ANU CECS	deputy.dean.cecs@anu.edu.au ph: 02 612 57611
PSG (incl OOD) Duane Findley	General Manager (Interim) ANU CECS	gm.cecs@anu.edu.au ph: 02 6125 1451
School of Computing: Professor Antony (Tony) Hosking	Director of School of Computing (designate)	antony.hosking@anu.edu.au
School of Cybernetics: Distinguished Professor Genevieve Bell	Director of School of Cybernetics (designate)	genevieve.bell@anu.edu.au
School of Engineering: Professor Christopher Kellett	Director of School of Engineering (designate)	christopher.kellett@anu.edu.au
Belinda Farrelly	Associate Director, Organisational Change	org.change@anu.edu.au belinda.farrelly@anu.edu.au (02) 6125 3012

# Support for Staff

Staff seeking additional support or advice should contact:

Name	Position	Contact Details
Gail Frank Dr Maaria Haque	Adviser to staff Adviser to staff	(02) 6125 3616 (02 6125 8283 staff.adviser@anu.edu.au
Employee Assistance Providers	Assure Relationships Australia	1800 808 374 (02) 6122 7100



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# **APPENDICES**

Appendix 1: CECS FAQs

Appendix 2: Advisory Panel Terms of Reference

Appendix 3: Updated cluster descriptions

Appendix 4: New College Structure
Appendix 5: New Structure: School of Cybernetics Appendix 6: New Structure: School of Computing Appendix 7: New Structure: School of Engineering Appendix 8: New Structure: Office of the Dean

Appendix 9: New Structure: Professional Services Group



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# **APPENDIX 1: Frequently Asked Questions (FAQs)**

Updated 29 October 2020 at 2.30pm

# 1. Is there a coordinated approach to change across ANU, to avoid gaps or overlaps in capability or to share resources across two or more Colleges or Portfolios?

Following the release of the College and Portfolio Recovery Plans on 13 October 2020, each Colleges and Portfolios have commenced forums and updates within their local areas.

Some detailed Change Management Plans - like from CECS and CASS - have already been released and are in a consultation period at the moment. Further plans are expected to be released across the ANU Community during November 2020 and in early 2021 as areas consider any changes that may be required to respond to and support the ANU Recovery Plan and the Expenditure Control Framework (ECF).

Colleges and Portfolios are working closely during this time and with the ANU <u>Service Performance Framework</u> which will ensure our services are collaborative, responsive, continuously improving, value for money and provide exceptional service.

# 2. The Professional Services Group (PSG) is likely to be impacted by the proposed changes. What plans could we have in place to ensure the PSG is supported during this time so that critical services are still able to be delivered during this period of disruption?

A high-performing and effective PSG is critical to the continued success of CECS. The PSG has been instrumental in the growth of CECS to the present and will continue to be in our future.

It is a priority to ensure continued delivery of PSG services along with support for the PSG team as we consult on proposed changes within the College. This support and focus on continuity of service will continue through any period of implementation for any confirmed changes. We are seeking as far as possible, to minimise disruption.

To assist and support the PSG during this time, the proposed changes include the continuation of fixed term and contracted staff within the PSG (including those on temporary transfers into CECS) for their contracted periods. This will further assist in ensuring the delivery of critical services through this time.

# 3. Why are we standing up/down different intellectual areas? Why are we pursuing this new structure and how does it capture and/or facilitate our aspirations for interdisciplinary work?

The Change Management proposal outlines a structure for the College that would organise the proposed new Schools around activity clusters. The structure outlines a limited set of activity clusters - Aerospace Engineering, Autonomy, Agency and Assurance Institute, Computational Science, Data Science & Analytics, Design, Electrical Engineering, Environmental Engineering, Intelligent Systems, Mechatronics, Secure Software Systems, Software Innovation, and Systems. Importantly, while Field of Research codes have been proposed as a method to populate certain clusters from our existing staff, these Field of Research codes do not define the clusters.

The proposed adoption of an activity cluster model also reflects both the advice received from the recent external Advisory panel, as well as an accepted organisational model that drives impact, including at universities we would regard as aspirational global peers. It is hoped that this model of activity clusters will allow the development of increasingly robust cross-school and cross-university engagement.

The ANU Recovery Plan specifically stated: "The ANU College of Engineering and Computer Science launched their 2025 Reimagine Strategic Intent last year to create capability for Australia's future. The 2021 allocation reflects the College's next steps in developing future disciplines and acknowledges the important role played in the generation of international student revenue." In other words, the financial allocation to CECS accommodated a set of high-level and exogenous expectations and constraints set by the financial implications of the ANU Recovery Plan, the ongoing commitment by the VC and ANU Council to the agenda set by the Reimagine Investment and the University's strategic investment in the Innovation institutes. The proposed activity clusters were developed within that set of externalities.

The proposed activity clusters carry forward two of the three CECS Innovation Institutes reflecting the University's commitment to continuing the work of the Innovation Institutes (3Ai, SII). They carry forward



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a subset of the academic activities originally planned for the new Schools funded under the Reimagine Investment; and they carry forward affordable traditional and emerging, externally recognised academic strengths of the College. These choices about what to do - or, by implication what not to do - are not indicative of the relative importance of different areas but represent a subset of activities with a viable pathway to the critical mass to achieve excellence in education, research, and impact.

# 4. How will the proposed changes to programs affect current students? How are students being consulted and considered in this proposal and its implementation?

Students are valued members of the CECS and University community and their input and involvement in discussions of the proposed changes are very important.

A high priority for the College, and across the University, is to deliver strong educational experiences as a basis for our students to take advantage of more flexible future study and career opportunities.

Town Halls for coursework and Higher Degree Research (HDR) students were held on 23 October 2020 to seek direct input from our student community. The consultation period on the proposed changes continues till Thursday 29 October and we invite continued feedback to be submitted via the CECS ANU Recovery page here or to org.change@anu.edu.au

Current students in proposed discontinued programs or majors will be supported and have pathways to completion. Teach-out plans would be developed to ensure that students can satisfy the requirements for their programs and not be delayed in their progression. In any teach-out plans, some courses may be substituted in program requirements to enable completion for students where individual courses themselves are disestablished, but every effort would be made to substitute like for like. Accreditation of programs would be unaffected. Affected students would be consulted in planning and implementation to understand their preferences and concerns.

- With respect to the proposed discontinuation of the BSEng(Honours) the last entering cohort would begin in 2021. All current and incoming students in the program would have the option of transferring into the BAC(Honours). With the core course overlap between these programs this should be relatively straightforward
- The proposed changes in the Engineering education offerings were commenced external to and prior to this process. In summary, the Bachelor of Engineering (including R&D) will remain but it has already been proposed that majors in Biomedical Systems and Mechanical & Material Systems are to be discontinued, as is the Master of Engineering in Digital Systems and Telecommunications Engineering. Consultation, including with affected students, has occurred and teach-out plans are under active development. Currently enrolled students will be provided with a pathway to complete their chosen major. Discontinued majors will not be available to students commencing from 2021.
- The proposed Environmental Engineering major is working its way through final University approvals and is expected to be available to students from 2022.

# 5. The change proposal is silent on what happens to the (PSG) tasks that are currently done by the roles being removed. Have these tasks been identified for removal as unnecessary?

The change proposal identifies the proposed core service and themes that the PSG will continue to deliver capability against - within the framework and scale of resources available to the College. It also recognises that, as the University more broadly considers and implements the <u>Service Performance Framework</u>, the manner in which services are delivered will evolve to support a sustainable operating model that enables a leading-edge environment for students, academics, professional staff and partners in service experience, delivery and design.

In considering the proposed changes, it is recognised there will be some services and tasks the PSG will continue to do and there will be some that will change.

If any individual or group has identified particular areas of concern, they are encouraged to bring these forward for consideration or through one of the key contacts listed in the Change Proposal.

The consultation period on the proposed changes continues till Thursday 29 October and we invite continued feedback to be submitted via the CECS ANU Recovery page <a href="mailto:here">here</a> or to org.change@anu.edu.au.

#### 6. What tasks have been mapped out of the PSG and into school or portfolio levels and why?



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Different services are embedded at different layers throughout Colleges, Schools and Portfolios across the University. A feature of the proposed changes within CECS is to recognise certain functions may work with like functions and benefit from "critical mass" through co-locating with similar colleagues and services, and be closer to the core of where they need to be.

For example, commodity IT services are presently lead by the Information Technology Service Division (ITS) at the whole-of-ANU level. However, specialist computing support services are intended to be closer to their centre of mass. This is the case for computing research and education support services in the proposed School of Computing, where a focus on IT in education and CECS centric services are required.

For such specialist services, the capability and support will be available throughout the College. Similarly, the WHS services working within the proposed School of Engineering are providing specialist services required within the School, while supporting the general and important WHS requirements and reporting required across the College.

## 7. Why are we moving to generalist position titles across the professional services teams?

The change proposal outlines both a proposed structure and proposed position titles within the redesigned PSG. The rationale for the proposed new position titles was to emphasise the importance of our service delivery and collaborative culture.

The consultation period on the proposed changes continues till Thursday 29 October and suggestions, feedback and ideas on the proposed position titles including options and alternatives to these are encouraged. Feedback can be submitted via the CECS ANU Recovery page <a href="mailto:here">here</a> or to <a href="mailto:org.change@anu.edu.au">org.change@anu.edu.au</a>

# 8. In the proposed new structure for the PSG there are a small number of positions and more people than available positions in certain areas. Are you taking account of part-time work?

Positions in the proposed new PSG structure have been presented as full time positions to reflect the level of resourcing that is expected to be required and available within the budget. Flexible working arrangements are already in place across the University and arrangements like job-sharing or part time or reduced hours are currently available and can be implemented by agreement between staff members and supervisors. These arrangements may be suitable in some areas; however, it will not be suitable for all staff, positions or across all areas of the University.

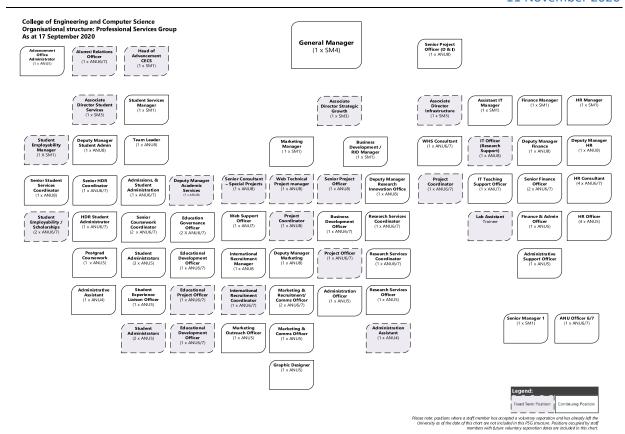
# 9. Can you please produce detailed before and after organisational charts of the PSG to help staff understand the change? \*Updated Tuesday 27 October 2020

All organisational charts prepared as part of change proposals are released with position titles and level details only. The proposed PSG organisational structure is included in the change proposal. The current PSG organisational chart has been prepared and is included in the list of reference documents.



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# 10. When will decisions about a new structure be made; and how and when will the implementation be rolled out?

The two week consultation period on the proposed changes commenced on 15 October 2020 and will continue till Thursday 29 October 2020. Staff, students and other stakeholders are encouraged to consider the proposed changes and submit their questions and feedback during this time.

All input is being collated and carefully considered and will be included in the preparation and release of a change implementation plan.

The implementation plan will include:

- genuine consideration of matters raised about the proposed changes; and
- the confirmed changes and the process and timeframe for implementation.

For any of the proposed changes that are confirmed in the Implementation Plan, details on positions that can or cannot be directly transferred will be outlined. This will include details on eligibility for EOI processes where a selection process is required before a direct transfer can be confirmed.

We will consult with staff impacted by any confirmed changes individually for all possible options in accordance with clauses 67 and 68 of the ANU Enterprise Agreement

The University set out a <u>timetable</u> in the change management proposal, and will keep staff and students informed of any amendments to this timetable.

If you have any questions about the change management process, especially implementation, you are encouraged to contact the nominated members of staff in the below table:

Name	Position	Contact details
Professor Elanor Huntington	Dean ANU CECS	dean.cecs@anu.edu.au ph: 02 6125 8807
Professor Nick Birbilis	Deputy Dean ANU CECS	deputy.dean.cecs@anu.edu.au ph: 02 612 57611



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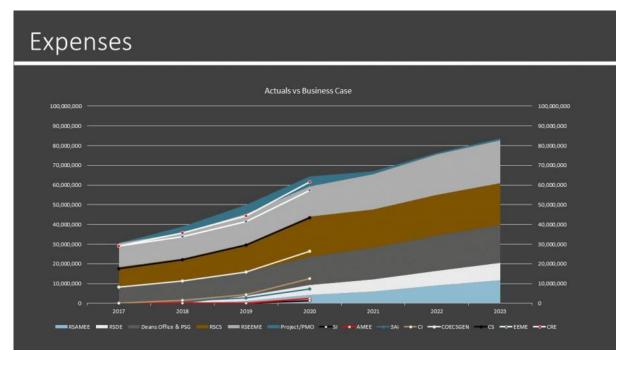
Duane Findley	General Manager CECS	(Interim)	ANU	gm.cecs@anu.edu.au ph: 02 1451	6125
Belinda Farrelly	Associate Directo Change	r, Organisat	tional	org.change@anu.edu.au belinda.farrelly@anu.edu.au ph: 6125 3012	02

Further information about organisational change and consultation at ANU can be found in <u>clause 68</u> of The Australian National University Enterprise Agreement 2017-2021.

# 11. What is the breakdown of expenditure for organisational units in CECS over the last few years? \*Added Thursday 29 October 2020

The figure below shows expenditure across CECS, with comparison to the Reimagine business case. 2020 figures are as budgeted at the start of the year.

(you can click on the figure to enlarge or access full size document here)



The figure shows stacked (ie cumulative) expenditure across CECS, with comparison to the Reimagine business case. The stacked lines represent actual expenditure for 2017, 2018, 2019 and budgeted expenditure (as at the start of the year) for 2020. The stacked regions represent the planned expenditure approved under the Reimagine business case

# 12. How bad is the fiscal cliff for computer science at the ANU and what are the implications for the future of computing at the ANU? \*Added Thursday 29 October 2020

In the period 2016 to 2019 computer science teaching programs at the ANU grew rapidly. The growth was dominated by international students: from 508 EFTSL (59% of total load) in 2016 to 1335 IN 2019 (72% of total load). 2020 has seen a small drop to 1126 EFTSL (62% of total load). However, commencing student load has dropped much more significantly by 38.4% from 328 EFTSL in 2019 to 202 EFTSL in 2020.

University modelling predicts aggregated course load for computer science (including students from non-CS degree programs) falling from 1,602.6 in 2020 to 1360.8 in 2021, 1203.6 in 2022, and 1162.1 in 2023—representing a decline of 38% over just three years. Thus, the vacuum created in the student pipeline already evident in 2020 is predicted to carry forward for the next several years, and would result in student load in computer science retreating to pre-2017 numbers just as rapidly as that load was acquired.



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Computing at the ANU has evolved significantly since 2016, not just in RSCS. Under the Reimagine business plan, many new academic staff have been hired into RSCS, academic staff in computer vision have been hired into RSEEME, and the Software Innovation Institute (SII) has pioneered new ways of translating computing research and education at the ANU into the world. These strategic gains address many of the criticisms delivered in the RSCS external review of 2016.

The proposed new School will lock in these gains in a more streamlined footprint that is positioned not just to survive the projected precipitous drop in student fee income, but also ensuring headroom for the proposed new School to thrive in alignment with university-wide recovery. The proposed new School of Computing would be larger than the present RSCS, with a proposed 2021 ECF budget to match (\$19M as compared to projected ECF expenditures for RSCS of approximately \$16M in 2020). This size reflects significantly expanded capabilities, consolidating computing activities from across the College, including returning research/education computing facility operations formerly held by the College to a School that they primarily serve.



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## APPENDIX 2: Terms of Reference for the external advisory panel

In the face of the significant challenges faced by the University, the Vice-Chancellor and College Dean convened an external panel to provide ongoing advice on reordering of the original Reimagine Intent for the College, working title "Reimagine Reordered". The Terms of Reference follow.

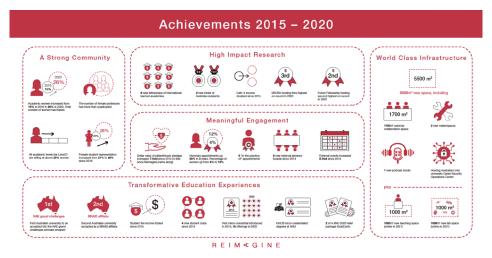


#### Context

The Australian National University (ANU) was founded in 1946 as an explicitly national university, chartered to build capability and capacity. Today, our place amongst the great universities of the world is under increasing pressure, and we must work harder than ever to demonstrate our ability and commitment to delivering on our national mandate A vibrant and effective College of Engineering & Computer Science (CECS) is essential to achieving that mandate.

Following significant strategic and business analysis, ANU Council in December 2018 gave final approval to the 15-year long, \$350M "Reimagine" Investment in CECS. The investment was designed to enable a profound reimagining of engineering and computing education, research and engagement for the 21st Century. Approximately half of the Reimagine investment was approved for capital works and the other half in forward investment to hire an additional 100 faculty to bring new capability to ANU.

In its first 18 months, the College has hit, or exceeded, every one of the Reimagine Investment targets.



The COVID-19 pandemic and its economic and societal impact hasn't changed the strategic imperatives that drove Reimagine; it has accelerated them and brought into sharp focus the educational pillar of the Reimagine strategic intent. However, the financial assumptions underlying the approved Reimagine investment are no longer valid due to both COVID-19 financial fall-out (ANU strategic reserves depleted in 2020 and persistent international student revenue collapse across the entire Australian Higher Education sector), and also Commonwealth Government changes to funding structures.

The Vice-Chancellor has tasked the Dean and Directors of CECS to develop a revised plan to achieve as much as possible of the original Reimagine strategic intent. That plan is to be underpinned by a financially sustainable business model, including an expectation of flat or even contraction of staff head-count over the next 3 years. All options are on the table to achieve that, including but not limited to major reforms in business models, markets, organisational structure, cost base, expertise base, as well as timing and sequence of outcomes contemplated under the original plans.

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## Terms of reference for this panel

This panel is convened to provide:

- Advice on strategic choices and directions of the "Reimagine Re-ordered: 2020-2025" plan
   With particular emphasis on matters pertinent to the mission of Australia's only national university, considered judgement about the future state (2025-2030) of:

   a. Engineering and computing in wider context

  - b. Higher education in wider context, with a focus on educational delivery

2 | THE AUSTRALIAN NATIONAL UNIVERSITY



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## **APPENDIX 3: Updated Cluster Descriptions**

As indicated in the main document, the three proposed Schools (Computing, Cybernetics, and Engineering) and Professional Services Group (PSG) consist of proposed activity clusters or focus areas. Sketches of the activity clusters are provided here.

Aerospace Engineering: Access to space and uncrewed aerial systems are rapidly decreasing in cost, driving new opportunities. We will pursue topics in space systems engineering, advanced propulsion systems, and control of aerospace structures and vehicles. A key central topic of the School of Engineering will be aerospace systems for Earth observation. These topics will leverage particular ANU strengths in electrical and mechatronics engineering, as well as expertise from the Advanced Instrumentation Technology Centre. We will continue to be a key contributor to ANU InSpace. We will design and deliver a world-class systems-focussed aerospace engineering education program with a suite of offerings including microcredentials, undergraduate, and postgraduate coursework. We aim to be the education partner of choice for national and international aerospace companies, particularly in the systems space.

Autonomy, Agency and Assurance Institute: While the public conversation continues to be about Artificial Intelligence (AI) and ethics, there is growing realisation of the need to identify, build, and scale the skills and knowledge needed to design and manage AI-enabled cyber-physical systems through the life-cycle. We will complete the mission to establish a new branch of engineering (NBE) focused on safe, sustainable, and responsible technology at scale. We will build out the educational programs under the NBE (MA, PhD, microcredentials), via research-led iterative design principles. Our research should continue to focus on emerging cyber-physical systems in context, working collaboratively with industry, government, academic, and not-for-profit partners. We will lead the establishment of similar offerings at various educational hubs around the world.

Computational Science: Computation increasingly drives discovery in the sciences and engineering. We will design, implement and use mathematical models to analyse and solve computationally demanding problems, using advanced computational infrastructure and algorithms to perform large-scale simulations of physical systems and processes, and visualise the outcomes to inform the science. Drawing on advances in machine learning (ML) and artificial intelligence (AI) we will enable new approaches to virtual discovery and design, and the effective utilisation of computational assets at scale. Our education programs will train computational scientists and provide them with skills in high performance computing relevant to science and engineering. We propose to work with partners in target applications such as environmental science, computational biology, bioinformatics, quantum physical systems, and nanotechnology, to accelerate discovery in these domains.

Computing Foundations: Computing platforms underpin global commerce, governance, and social wellbeing as critical infrastructure. We will focus on the software and hardware foundations of computing, and its theory, to improve the safety, reliability, and performance of software systems, and to make them scalable and secure. We will combine teaching and research in the foundations of computing: logic and verification, theory of computation, computer organization and architecture, operating systems, formal methods and methodologies for software development, and programming languages and tools. We will work closely with industry partners on solutions to problems for real systems. Our education programs will emphasise hands-on implementation and project-based learning.

Data Science & Analytics: Data is central to understanding the world and society through acquisition, curation, processing, storage, retrieval and modelling. We will pursue a rigorous understanding of data and its contexts and implications. We will engage with domain experts in government, business, and the health and social sciences to build models for turning data into information to support effective and confident economic and social decision making. Our research will focus on the design and construction of robust processes for data modelling and validation, leading to prototypes, algorithms, and systems for domain-specific analysis. These tools will enable discovery and visualisation of trends in data, to derive meaningful conclusions and identify potential biases. Our broad teaching portfolio will include both micro and macro credentialing, and balance theoretical techniques with domain-relevant project-based learning, aimed at researchers, practitioners, and decisionmakers.

Design: At heart, the question, "We can build it, but should we?" is a design question. Design is now seen as the most powerful strategic capability for successful organisations. We propose building capability in the College to create a next generation studio model for teaching, research, and engagement that can



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then be adopted where appropriate across the College, with a specific initial collaboration proposed with the Environmental cluster below. We will operate as an open function, collaborating broadly to craft short, sharp, shaped experiences. There will be integration of research and education, built around design sprints and theory-into-practice encounters. Faculty, students, and partners should collaborate fluidly on transdisciplinary, outcomes-focused projects. We will establish formal relationships with corporations, government bodies, not-for-profits, and academic and educational institutions. Students will graduate with practical and relevant experience of high value to employers across a range of industries and sectors.

Electrical Engineering: Electrical engineering fundamentally underpins many of the solutions to current societal challenges. This includes the design and development of advanced communications, signal processing, and control algorithms. Existing expertise in these areas would provide strong support to endeavours in several of the other activity clusters; particularly mechatronics and aerospace engineering, and collaborating with the School of Computing in the area of computer engineering. We will contribute to the zero-carbon energy transition by advancing the state-of-the-art in 21st century power systems, particularly through the Battery Storage & Grid Integration Program. We will also continue to make fundamental contributions in the area of energy and devices, particularly in the area of solar photovoltaics and including the technology to underpin the hydrogen economy.

Environmental Engineering: Managing our natural and urban environments in the face of growing population pressures and climate change – including increasingly severe droughts, storms, and bushfires – is one of the great challenges of our time. We will focus on areas of significant national importance including interconnected urban systems, management and monitoring of our waterways and surrounding oceans, and bushfire prediction and response. This will leverage expertise in other Engineering clusters for the development of sensors, monitoring platforms, and signal processing algorithms, as well as in Computational Science and Data Science & Analytics clusters in the School of Computing. We will be able to work closely with allied efforts across the ANU including in the Fenner School of the Environment and the Research School of Earth Sciences. We propose to found a first-in-the-nation Indigenous Environmental Engineering Design Studio with the specific aim of threading Indigenous ways of knowledge throughout our work in this space. In collaboration with the Design cluster in the School of Cybernetics, this will readily serve as a seed activity to grow the support and use of Indigenous ways of knowledge across the College.

Intelligent Systems: Machine Intelligence augments human intelligence in analysing and synthesising vast amounts of information. We will focus on the computational modelling and design of intelligent agents in complex real-world contexts. Our research will integrate areas of artificial intelligence (AI), machine learning (ML), and vision and natural language understanding, to build autonomous systems that can perceive, plan, and respond to their environment in pursuit of high-level goals. Our teaching portfolio will include introductory and advanced courses in AI and ML from the foundational science to implementation of large-scale practical intelligent systems, with applications in computer vision, language understanding, and robotics, co-taught and codeveloped across the three Schools. We will also work across the university to address questions on integrating human and social values in AI systems, touching on aspects of philosophy, cognition, ethics, and safety.

Mechatronics: Industry 4.0+ will rely heavily on advanced, flexible, and configurable manufacturing. Environmental monitoring will require autonomous mobile air, land, and sea systems. We will build on the ANU's historical expertise in computer vision, machine learning, robotics, and systems and control to carve out a unique and internationally recognised mechatronics activity. We will pursue broad application areas in distributed optimisation and control of autonomous systems with a particular focus on the development of low cost, safety-critical monitoring and control systems. We will be well-positioned to support multiple highly competitive international student design project teams in mechatronics, providing students with world-class educational experiences particularly with respect to systems design, integration, and operation drawing on expertise in all three Schools.

Systems: Increasing complexity and the merging of technology, society, and environment mean that systems engineering has never been more important. Building on heritage engineering and IT, we propose to reinvigorate ANU as an internationally recognised centre for systems thinking, providing critical skills to industries and sectors working with complexity. We will develop research-led educational offerings that will make training accessible to people in their current role through microcredentials, giving them hands-on experiences of high value in their professional context. We plan to refine and flesh out the existing suite of macrocredentials to span the College and engage externally. Our research will be primarily applied, support cross-campus collaboration, and focus on industry contexts. Focusing on



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systems leadership for the 21st century, we aim to become the Australian Public Service (APS) systems education provider of choice.

Software Innovation Institute: SII is developing new ways to train the next generation of Data Scientists and Software Engineers. We are creating, applying and teaching state-of-the-art techniques in Data Science and Software Engineering to provide world-leading integrated learning for students, while addressing some of the complex challenges of today. We will work with clients to create systems that solve their data problems and provide the information to drive business decisions. We bring together leading researchers, industry experts, and students to translate research, design, engineer and build solutions to complex problems, cognizant of cultural context while preserving privacy. Working with colleagues across the university we will be the translational engine for the School and a locus for experiential learning.

Professional Services Group - Engagement: The impact of the College is defined by those with which the College engages (industry, research funding agencies, government, and communities). The Engagement cluster of the PSG includes a core focus on engagement, inclusive of what has been typically called business development, research services, marketing, recruitment and outreach. Unification of these activities will allow integration of messaging, assets, staff utilization, and consolidated service to stakeholders.

Professional Services Group – Community: Students (undergraduate, postgraduate, and by research) are the lifeblood of the ANU. A common thread that links all students in the College Strategic Intent, is that they all should have an exceptional Student Experience. Part of an exceptional student experience is student employability. By combining the student services function, along with academic services (included compliance and accreditation), student experience and employability, and Diversity & Inclusion – a unit focusing on the core part of our community is best placed to serve that community.

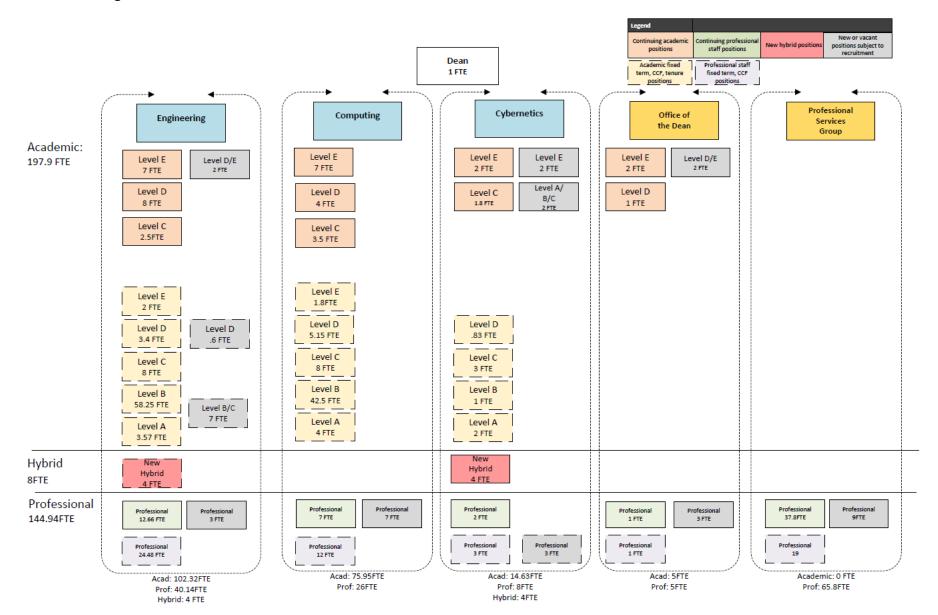
*Professional Services Group – Resources*: The ability to serve the College community and those with which the College community interacts, hinges on the resources (human, physical and digital) within the College and across the ANU. The resources team will be integrated across financial and business systems, working together to ensure seamless coordination of information, systems, processes, and strategic information. Continuous improvement, including Dev-ops – will provide an integrated strategic unit fulfilling HR, Finance, Infrastructure, and IT functions.



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# **APPENDIX 4: New College Structure**

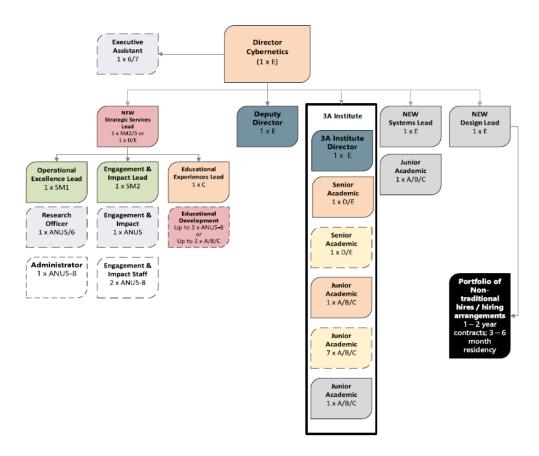




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# **APPENDIX 5: New Structure: School of Cybernetics**



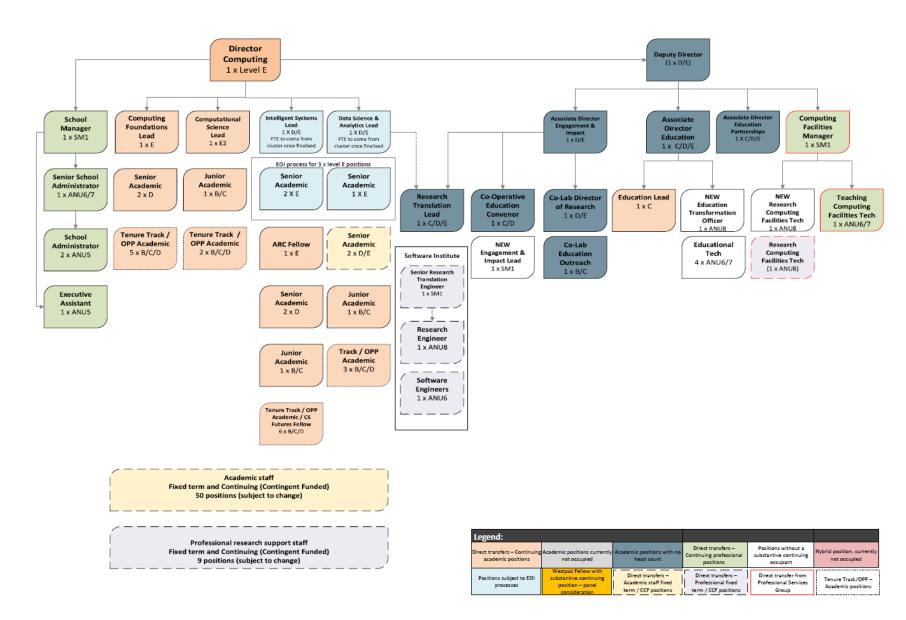




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## **APPENDIX 6: New Structure: School of Computing**

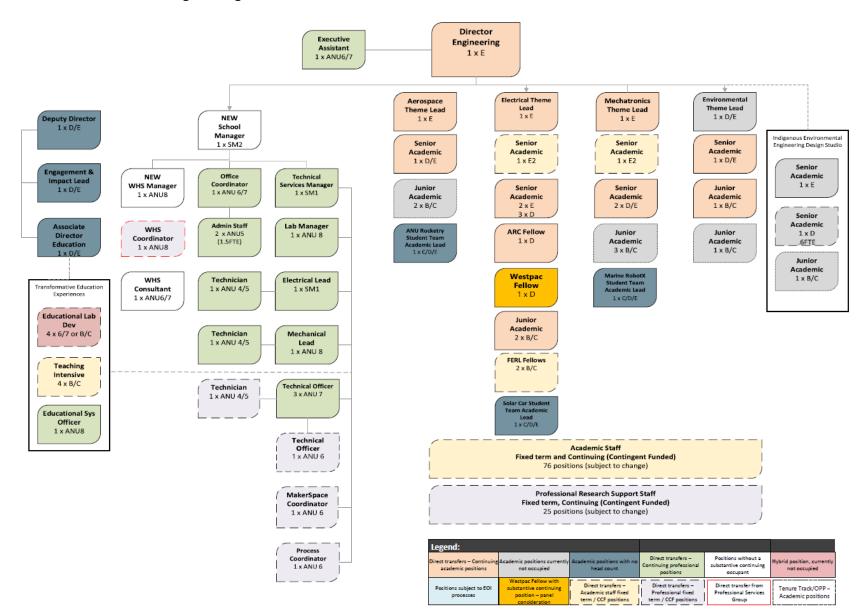




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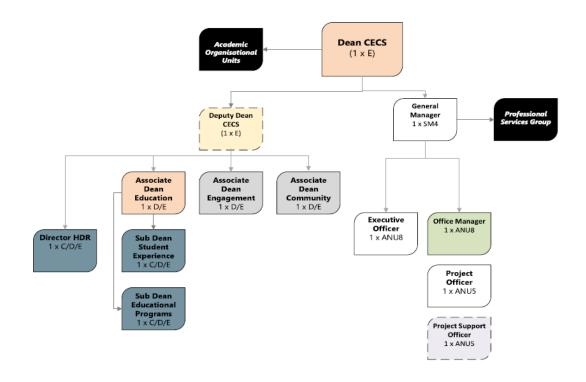
# **APPENDIX 7: New Structure: School of Engineering**



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## **APPENDIX 8: New Structure: Office of the Dean**



Legend:				
Direct transfers - Continuing academic positions	Academic positions currently not occupied	Academic positions with no head count	Direct transfers - Continuing professional positions	Positions without a substantive continuing occupant
Direct transfers – Academic fixed term / CCF positions	Direct transfers – Professional fixed term / CCF positions	Positions subject to EOI processes	Vacant – substantive incumbent on temp transfer	

PLEASE NOTE: Temporary Transfers are not included in this chart



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# **APPENDIX 9: New Structure: Professional Services Group**

