



Review of the Australian Qualifications Framework

Discussion Paper

DECEMBER 2018

The Australian Qualifications Framework (AQF) Review Panel wishes to draw on the considerable expertise and experience that has developed across a broad range of organisations and individuals in relation to the Review's [Terms of Reference](#).

In its discussion paper, the Panel has opted to provide to organisations and individuals some of the Panel's initial thinking about the case for change to the AQF, but invites differing analysis, conclusions and proposals.

To make a submission to the Review, please email this form to AQFReview@education.gov.au by **15 March 2019**.

Please note that the Australian Government Department of Education and Training will not treat a submission as confidential unless requested that the whole submission, or part of the submission, be treated as such.

Please limit your response to no more than 3000 words.

Respondent name

Professor Robin W King

Respondent organisation (where relevant)

Australian Council of Engineering Deans

1. In what ways is the AQF fit, or not fit, for purpose?

Fit for purpose: the current AQF works well to specify and describe the qualification types used in higher education sector, and is well aligned with other countries' frameworks.

The Australian Council of Engineering Deans (ACED) and its 35 members greatly value the AQF for the higher education types and descriptors for Levels 6 – 10. Several of these levels and types align directly with the outcomes-based and internationally benchmarked qualification specifications of the national engineering professional accreditation body, Engineers Australia (EA). These alignments are shown in the following Table.

We value particularly the 'embedded' form of the AQF 8 Bachelor Honours Degree. This recognises within the AQF that Australia's 4-year long professional engineering degree (that has been the externally accredited qualification since 1980) delivers more advanced, professional and research-based outcomes than any Bachelor Degree. ACED members have worked assiduously to ensure that the AQF8 descriptors are fully met within their implementations of the Bachelor Honours Degree. Approximately 8,000 Australians and

4,000 international students graduate from an embedded AQF 8 Bachelor Honours Degree in engineering annually. We do however suggest an improvement to the specification of this award in the next section.

Occupation and EA membership category	Award (minimum full-time equivalent academic years of study, post-secondary school)	AQF Level	International Accord
Professional Engineer	Master (coursework) (5 years)	9	Washington
	Bachelor Honours (4 years)	8	
Engineering Technologist	Bachelor (3 years)	7	Sydney
Engineering Associate (senior technicians)	Associate Degree (2 years)	6	Dublin
	Advanced Diploma (2 years)		

The AQF9 Masters pathway to the professional engineering qualification is normally structured as a 2-year coursework program following a Level 7 degree in a cognate area. Most of ACED's members operate such programs and they are very popular with international students: the AQF specifications and descriptors work well.

Many ACED members offer two other types of AQF9 Masters coursework program: some in advanced technical engineering, others in professional practice and management. In both cases, they may be structured to have exit awards at AQF8 Graduate Certificate and Graduate Diploma levels. These types and descriptors also work satisfactorily.

As may be seen in the Table above, the engineering technologist and engineering associate qualifications, though taken by smaller numbers of students, also align well with the AQF Levels 6 and 7, and with their respective outcomes-based international accords. We comment on pathways in section 2 following.

Not fit for purpose:

ACED and its members have, over recent years, had cause to discuss several matters raised in the Discussion Paper that could be improved. These include exit awards, short courses and micro-credentials. These and other matters are discussed in the next section.

2. Where the AQF is not fit for purpose, what reforms should be made to it and what are the most urgent priorities? Please be specific, having regard to the possible approaches suggested in the discussion paper and other approaches.

1. AQF taxonomies and levels and the value of VET question

ACED does not favour increasing the number of levels in the AQF. We favour retaining different descriptors for knowledge, skills and application skills for each qualification type at the same level, as is the current case with the three types of Masters Degree.

ACED considers that each type must be defined more clearly in terms of its typical entry level or pathway, as well as its volume (see later) and outcomes. The outcomes must be assessed within the qualification. This would also pick up the issues raised on pp24-25 of

the Discussion Paper.

High priority: review the current statements of entry levels and pathways to show clear distinctions between levels

The number of types at each level should be only as large as necessary. In point 9 below we suggest that separating the embedded form of the Bachelor Honours Degree would be a useful additional Level 8 type to assist employers, educational designers and prospective students.

2. Recognising responsibility and autonomy within qualification specifications

All individuals conduct their work autonomously and within teams, taking appropriate personal responsibility.

Taking engineering as an example, successful outcomes invariably rely on teamwork and a huge range of cognitive, manual and social skills. Knowledge and skills are possessed by individuals with qualifications from Level 3 to Level 10: engineering tradespeople, engineering technicians, engineering technologists, professional engineers and executive engineers, together fulfilling manual, intellectual, integrative and management tasks. Each individual has multiple responsibilities: to clients, to the team, to the community at large and to the environment, and will work with variable degrees of autonomy. Engineering work takes place in a huge range of enterprise contexts, many of them global.

ACED considers that the AQF cannot realistically “reflect the level of autonomy and responsibility” associated with any qualification type. Awareness of relevant contexts of work should be part of the core qualifications for Levels 3 to 10.

High priority: review the type descriptors to explain that there are very wide ranges of workplaces and employment situations in which individual responsibility and team work are exercised.

3. Increasing the value of VET qualifications

ACED wishes to see VET qualifications (Levels 3 to 6) in scientific, technological and engineering areas raised in status and quality to support Australia’s capacity to engage with such areas and opportunities such as the digital economy, telehealth, advanced manufacturing, intelligent building systems, new construction materials and methods, autonomous vehicles, new energy systems; new materials, etc. Some of these developments are captured by initiatives such as *Industry 4.0* and the *Internet of Things*.

We also envision the need for more individuals (with prior qualifications at many levels) to have qualifications in and for entrepreneurship and innovation. Such qualifications are likely to be delivered in both HEd and VET sectors.

Raising the status of VET qualifications is a genuinely complex problem. Improvements to the AQF, such as better level and type specifications, may contribute, but can only be part of the story. We support the proposition on p 23.

High priority: review the knowledge and skills domains and their application across the AQF levels

4. A wider range of credential types: short courses and micro-credentials

ACED members have discussed the value of validating short courses and micro-credentials for engineering professionals for their continuing professional development. We recognise that within the higher education sector, aggregating short-courses (which could include MOOCs and cross-institutional enrolments) into existing post graduate award types is already possible. That this is not common may say more about the agility and flexibility of providers' program approval processes than any shortcoming in the AQF.

Having AQF define a **short-course type** and guidelines for aggregation into a **small number of qualification levels and types** would be useful to supplement base qualifications at Levels 6 – 8. This is similar to the concept mentioned as being favoured by the Business Council of Australia.

That said, it is important that the knowledge and skills gained through for example, a Bachelor Degree plus two short-course based Graduate Certificates, is **not equated** with the outcomes of an integrated 4-year Bachelors Honours Degree. The two sets of qualifications would be equivalent in terms of total learning volume but would be different in their overall balance of knowledge and skills.

The Discussion Paper does not suggest a minimum volume of learning for a short-course credential or micro-credential. These would need to be determined through reviewing current practice for current certificates (as mentioned on p28) and amongst professions. Of the general approaches on p18, ACED favours using the existing level and type criteria to guide the specification of any short-form credential types (several bullet points apply).

The Scottish approach would have merit for extending the AQF.

High Priority: develop proposals for specifying short-form credential types for a small number of specific AQF levels and corresponding incorporation into the AQF.

5. Volume of learning and a national credit point system

Specifying the typical durations of major qualification types (such as Bachelor Degrees) in terms of full-time academic years (and equivalent hours of learning) will continue to be useful for course designers and for international benchmarking. (It is also useful for learners to realise that 1200 hours of learning equates to 40 hours per week over two 15 week semesters, and subsequent assessment.)

Such volume specifications must also be accompanied by clear specification of the entry level (see point 1). ACED supports the development of a national credit point system that covers both HEd and VET. It is logical to apply this to the new learner (at the specified level) who has the appropriate background to commence the course.

This would be advantageous to international and local students who already have to cope with alternative institution-determined nomenclatures for course of study (program), unit of study (subject, course, topic), the number of credit points per full-time academic year, and assessment systems (different base GPA). ACED would favour developing a credit point system that is based on hours of teacher-supported learning (but including self-study). One point per notional 10 hours of learning is the international norm.

High Priority: develop a credit point reference system with a common baseline for both HEd and VET.

6. Enterprise and social skills

As implied earlier, ACED sees the inclusion of social and enterprise skills to be mostly part of existing qualification types, where they can be contextualised. ACED favours the first approach on p20 for including these skills in the AQF:

Medium Priority: specify that relevant social and enterprise skills should be taught and assessed in qualification's core content

7. Exit qualifications

ACED would welcome a change to the AQF Issuance Policy to allow exit qualifications to be specified for multi-semester awards, at points where type specifications and descriptors are met. This provision would have been valuable for some ACED providers in restructuring their 4-year integrated Bachelor Honours Degrees.

Medium Priority: revise the AQF Issuance Policy to allow exit awards from partially completed multi-semester awards

8. Qualifications Pathways policy

ACED members value Australia's approach to pathways that allows for the maximum possible credit to be awarded to holders of prior qualifications. This is most often used for holders of Level 6 awards (both higher education and VET types) to articulate into Level 8 Bachelor Honours Degrees. We frequently find that it is not possible (in students' interest) to award the maximum allowable credit, simply because the prior qualification does not contain fundamental subjects (such as mathematics), even though the prior qualification may include more advanced knowledge and skills in an applications domain than the degree. ACED also accepts the need to value non-formal prior learning, providing this can be validated. The responsibility for awarding credit must lie with the provider.

For recognition of both formal and non-formal prior learning, ACED strongly supports the first approach suggested in the Discussion paper.

Medium Priority: Revise the Pathways Policy as guidance, noting that primary responsibility for providing and validating pathways lies with providers.

9. The AQF8 Bachelor Honours Degree type and specification

Our final point is one of detail, but would have value for ACED and possibly other professional areas.

As noted above, the inclusion of the embedded form of the AQF8 Bachelor Honours Degree has been very beneficial to ACED and its members. It is fit for purpose **but not widely understood by employers and prospective students, and some education providers**. With the large numbers of graduates from this qualification type ACED considers that it would be timely to elaborate the strongly dominant narrative around this being 'the Honours year'. Embedding the additional set of outcomes in 'integrated' courses could be expressed more clearly to communicate within Australia and internationally that Australia operates 4-year integrated courses (that include the professional and research elements of the embedded Honours year across all years of the

course) to equip graduates for both professional and research pathways. We suggest the change could be achieved by either of two ways:

- (i) define two subtypes – Bachelor Honours Degree (one year) and Bachelor Honours Degree (integrated); or
- (ii) retain the current single type, but elaborate the ‘volume of learning’ statement, along these lines:

Current: The volume of learning of a Bachelor Honours Degree is typically one year following a Bachelor Degree. A Bachelor Honours Degree may also be embedded in a Bachelor Degree, typically as an additional year.

Proposed: The Bachelor Honours Degree may be awarded after one year of study following qualification for a cognate Bachelor Degree. Alternatively the Bachelor Honours Degree may be designed as an integrated course typically one year longer than a Bachelor Degree, in which the additional outcomes are embedded throughout the degree.

Medium Priority: review the specification for the Bachelor Honours Degree to include the embedded implementation more clearly.

3. In relation to approaches suggested by the Panel or proposed in submissions or through consultations, what are the major implementation issues the Review should consider? Please consider regulatory and other impacts.

ACED preferred approaches to the points raised above are identified. ACED does not see major implementation issues or regulatory impacts for any of them, provided there is sufficient consultation with the key stakeholders. ACED would be wish to be involved in changes that are likely to impact on qualifications for the engineering profession, as we were in previous developments of the AQF.

Other

This submission represents the position of the Australian Council of Engineering Deans Inc. The membership of ACED is a senior academic representative of each of the 35 Australian universities that provide professional engineering degrees accredited by Engineers Australia. ACED’s mission is to promote and advance engineering education, research and scholarship on behalf of the Australian higher education system.

Further information about ACED, including position papers and annual statistics on students and staff are on the ACED website: www.aced.edu.au

Contacts: Prof Doug Hargreaves AM, ACED Executive Officer d.hargreaves@gut.edu.au
Prof Robin King, Consultant to ACED robin.king@uts.edu.au
Prof Ian Burnett, ACED President, Executive Dean of the Faculty of Engineering and IT, University of Technology Sydney. ian.bunett@uts.edu.au