Australian Government | National Skills Commission

Australian Skills Classification

Release 2.0 – March 2022

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Our third release

In March 2021, the National Skills Commission ('the Commission') released the BETA version of its Australian Skills Classification ('the Classification') as an interactive online interface. For the first time in an Australian context, the Classification provided a universal taxonomy of skills – enabling stakeholders across sectors to identify and articulate the skills that underpin jobs in the Australian labour market and facilitating a range of diverse use cases.

The first update to the Classification, in September 2021, focused largely on stakeholder feedback. Enhancements were made to the interface to improve navigation, access and understanding; data improvements incorporated important contextual information and cultural capability into existing profiles; and ten new occupational profiles were added across a range of sectors.

We are pleased to bring you our next update to the Classification – one that brings the dataset out of BETA status, focuses more heavily on expansion, and brings the Classification more closely into alignment with the Australian and New Zealand Standard Classification of Occupations (ANZSCO) in terms of structure and coverage.

What's new

500+
new profiles added

Including for occupations such as Cyber Security Engineer, Meat Process Worker, Nutritionist and Landscape Gardener.

1000+
trending or emerging digital skills flags added to profiles

Adding dynamism to the Classification by showing digital skills that are growing in demand for, or new to, particular occupations. These are not only skills relating to the use of software and digital tools, but include digital skills relating to project management, communication and collaboration, science and mathematics, engineering and creative design.

This third release includes:

The addition of around 500 new profiles, made up of:

o New ANZSCO 4-digit unit group or 6-digit occupation profiles.

o 'Structural' profiles – where a 4-digit ANZSCO unit group contains only one 6-digit occupation, and the corresponding profile has been added for structural completeness.

o Specialisations – limited profiles that cover a subset of jobs belonging to an ANZSCO 6-digit occupation.

o 'Not Elsewhere Classified' (NEC) occupation profiles – limited profiles that cover the small occupations making up NEC occupation groups.

Additional amendments that reflect the November 2021 update to ANZSCO:

o Changes to unit groups and codes arising from the update.

o The inclusion of new ANZSCO occupations brought in as part of the update, beginning with occupations that align with the Commission's previous work on emerging occupations in the Australian labour market.

o The removal of some occupations previously in the Classification, where they have been significantly affected by changes to unit groups and the data needs reconsideration.

Data improvements, including:

o Changes to the 'Quantity Surveyor (233213)' and 'Construction Estimator (312114)' occupation profiles based on stakeholder feedback and engagement.

o Improvements to existing profiles as more context is added to related occupations.

o The addition of new specialist tasks, and updates to existing tasks and skills clusters.

o Updates to the technology tools data and the inclusion of tool descriptions.

o The introduction of emerging and trending skills flags.

As we continue to expand and improve on the Classification, the Commission welcomes your continued feedback to ensure it remains relevant to the current Australian context.

Confirming the Classification structure and approach

Practical and strategic applications of the Classification

Many public and private sector organisations are beginning to take skill-based approaches to policy, recruitment and training. The Commission hopes to facilitate these approaches by providing a data driven and dynamic Classification of skills that is high quality, independent and publicly available free of charge. The uptake and integration of our data is bringing to life the Commission's vision for the Classification to become a 'common language' for skills in Australia.

It is important to note that the Classification is largely context-agnostic. That is, it is designed to apply to occupations irrespective of business size, sector or industry, for example. In a similar vein, the Classification also strikes a balance between fine detail and transferability. That is, occupation profiles are detailed but not fully comprehensive, as granular-level detail can make it harder to recognise common and transferable skills. Instead, this framework facilitates comparisons, offering data-driven insights into the relationships between skills and occupations.

The Classification alone does not make career recommendations or provide advice about skills demand or other labour market trends. But it can enable these things when linked with other data and contextual information. Combined with other information, the Classification has powerful practical and strategic applications to:

- Improve job matching and the identification of job transition pathways by systematically linking the skills required in one occupation to another.

- Help workers and their employers to identify common and transferable skills, skills gaps and training opportunities.

- Help employers to better articulate their real skills needs and undertake workforce planning and development exercises.

- Provide a more detailed framework for economists and policy analysts to identify critical skills and potential labour market skills gaps.

- Help stakeholders including training and education providers, industry and governments to research and develop new training options.

Structure of the Classification

The structure of the Classification is largely unchanged since our first release, and contains three categories of skills:

- **Core competencies**: commonly used in all occupations (sometimes called 'foundation skills' or 'employability skills').

- **Specialist tasks**: the work activities a person undertakes specific to a job.

- **Technology tools**: a technology, such as software or hardware, used within an occupation.

The interactive interface also enables exploration of the Classification through two conceptual views – an occupation lens and a skills lens.

Occupation lens

The Classification currently contains over 1100 profiles outlining skills data for ANZSCO 4-digit unit groups and 6-digit occupations, as well as for occupation specialisations[1] and NEC occupations[2].

Information on core competencies, specialist tasks and technology tools are available for most of these profiles, however NEC and specialisation profiles by nature contain more limited detail.

The interface highlights the connections and potential transferability between Australian occupations by outlining the tasks required to undertake them, and showing which other occupations utilise each of these.

Skills lens

The interface also allows users to explore the data through the lens of skills, independent of the occupations they are connected to.

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[1] Specialisations are commonly used titles which refer to a subset of jobs belonging to an ANZSCO 6-digit occupation.
[2] NEC occupation groups are groupings of small occupations that are not captured in another part of ANZSCO but share a similar skill level, and sometimes a similar skill set.

All specialist tasks in the Classification are grouped together into skills clusters of similar specialist tasks, with the broad underlying assumption that if you can do one of the skills in the cluster, you can likely do the others. It is important to note here that in line with being largely context-agnostic, the Classification does not identify the pre-requisite qualifications, credentials, knowledge or experience required to undertake a job – and does not consider these in creating the skills clusters.

The skills clusters are grouped once more into skill cluster families. These are made up of related skills clusters, but importantly at this level they do not rely on the same underlying assumption about the ability to undertake all skills within them.

Visualising the connections between skills in this way highlights relationships and transferability that may not come to light when we consider only how they connect different occupations together.

Coming out of BETA

When we first released the data and interface in 2021, we released them as BETA to test whether the data features and specifics met the needs of stakeholders across a range of use cases.

Since then, we have heard from stakeholders with diverse focuses seeking to apply the Classification data in a range of ways – from supporting workforce planning to assisting with training or job transitions. We are also supporting our public service colleagues as they explore and implement use cases for our data across a range of Australian Government program, policy and service offerings.

While we continue to work with stakeholders on the data and interface, the removal of its BETA status reflects that, for the most part, the Commission has confirmed the Classification's structure and approach.

Expanding the Classification, and better reflecting ANZSCO

This release focused heavily on expansion, bringing the total number of profiles in the Classification to over 1100. This is an addition of around 500 profiles, noting that changes to ANSZCO in late 2021 necessitated the removal of some existing Classification profiles.

The new profiles include a mix of new ANZSCO 4-digit unit group or 6-digit occupation level profiles, specialisations, NEC occupations, and 'structural' profiles brought in for closer structural alignment to ANZSCO.

Reflecting the ANZSCO update

In November 2021, the Australian Bureau of Statistics (ABS) released an update to ANZSCO that reflected a review of occupations associated with the following four areas:

- Agriculture, forestry and fisheries.
- Cyber security.
- Naval ship building.
- Emerging occupations identified by the National Skills Commission.

These areas were based on priority areas for the Australian labour market and chosen to test a new approach to updating ANZSCO, as the update is the first incremental step of a larger program of update work.

The Commission has updated numerical ANZSCO codes for existing occupations in the Classification and is working to incorporate all other updates moving forward. For this release we have included some new occupation profiles, and temporarily removed some profiles where changes to ANZSCO groupings required the skills data to be reconsidered.

Emerging occupations

The Commission was pleased to work with the ABS in the consideration of our previously identified [Emerging Occupations](#) for inclusion in ANZSCO (National Skills Commission, 2020)[3]. Some of these have been incorporated as outlined in table one below, and are included as part of this update to the Australian Skills Classification.

NSC Emerging Occupation	ANZSCO occupation (2021 update)
Pricing Analysts	225113 Pricing Analyst
Agile Coaches	Project Management Coach (Specialisation of 223311 Training and Development Professional)
Devops Engineers	261316 DevOps Engineer
Biostatisticians	Biostatistician (Specialisation of 224113 Statistician)
Respiratory Therapists	234612 Respiratory Scientist
	311217 Respiratory Technician
Digital Marketing Analysts	225115 Digital Marketing Analyst
Social Media Specialists	225114 Content Creator (Marketing) Alternative title: Social Media Specialist (Marketing)
User Experience Analysts	261113 User Experience Designer (ICT)
Solar Installers	Solar Installer (Specialisation of 341111 Electrician (General))
Wind Turbine Technicians	Wind Turbine Technician (Specialisation of 399213 Power Generation Plant Operator)

Table one: NSC emerging occupations incorporated into ANZSCO as at November 2021

Structural profiles

To date, the Classification has included a mix of ANZSCO 4-digit unit group and 6-digit occupation profiles, and we understand there are use cases for skills information relating to both levels of the ANZSCO classification among users of our data.

As part of this release, we have created more structural completeness up to the 4-digit level – finding instances where an occupation exists in the Classification at either the 4-digit or 6-digit level and is part of an ANZSCO unit-group containing only one 6-digit occupation. Where we found this to be the case, we have introduced the corresponding 'structural' profile for completeness and to assist data users of different kinds to interact with and utilise our data. This means that there will be a profile for these occupations at both the ANZSCO

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[3] National Skills Commission, 2020, *The Emerging Occupations Report*, National Skills Commission, Australia.

4-digit level, as well as the ANZSCO 6-digit level. These profiles will also be essentially identical, with only minor differences reflecting their relative positions in the overall ANZSCO structure.

As much as possible, when bringing in new profiles, we aim to bring in entire unit groups at a time.

Specialisations

Another way we are bringing the Classification into better alignment with ANZSCO is with the introduction of skills data for specialisations. Specialisations are commonly used titles which refer to a subset of jobs belonging to an ANZSCO 6-digit occupation.

These jobs involve the performance of more specific tasks rather than the broader range of tasks usually performed in the occupation. As the Classification is industry-agnostic, specialisations help us bring in important contextualising information that reflect the specific contexts in which some work is undertaken – and help stakeholders across sectors see their occupations and skills better reflected in the Classification.

For this release, data has been added for five specialisations – of which four reflect emerging occupations as shown in table two below:

Specialisations	ANZSCO 6-digit Occupation
Biostatistician (emerging)	224113 Statistician
Wind Turbine Technician (emerging)	399213 Power Generation Plant Operator
Solar Installer (emerging)	341111 Electrician (General)
Pricing Analyst (emerging)	225113 Marketing Specialist
Fiberglass Layup Worker	839211 Plastic Factory Worker

Table two: list of specialisations included in the March 2022 Australian Skills Classification update

There are more than 1,400 specialisations in ANZSCO, and as we continue to expand the Classification, we will prioritise specialisations that add critical value and context to the Classification and that impact the tools and programs supported by our data.

Specialisation profiles contain more limited data than other profiles. They do not re-list the ANZSCO 6-digit occupation's specialist tasks or technology tools although some or all of them may be applicable. Additionally, these occupations do not include core competencies or capture time spent for specialist tasks. The difference between the specialist tasks in an ANZSCO 6-digit and a specialisation profile is shown in table three below.

225113 Marketing Specialist Identifies market opportunities and advises on the development, coordination and implementation of plans for pricing and promoting an organisation's goods and services.	Specialisation: Pricing Analyst Analyses market data and trends to inform product pricing strategies
Advise others on business or operational matters	
Analyse consumer trends	
Analyse data to inform operational decisions or activities	
Analyse industry trends	
Analyse market conditions or trends	
Analyse market research data	
	Collaborate with others in marketing activities
Conduct opinion surveys or needs assessments	
Conduct surveys in organisations	
	Coordinate operational activities with external stakeholders
Design websites or applications	
Determine pricing or monetary policies	
Develop business or market strategies	
Develop marketing plans or strategies	
	Develop pricing forecasts and models
Direct sales, marketing or customer service activities	
Discuss business strategies, practices or policies with managers	
Establish interpersonal business relationships to facilitate work activities	
Estimate cost or material requirements	
Evaluate potential of products, technologies or resources	
Evaluate program effectiveness	
	Maintain knowledge of current developments in area of expertise
	Maintain operational records
Measure effectiveness of business strategies or practices	
Monitor business indicators	
Monitor external affairs or events affecting business operations	
Prepare research reports	
Represent the organisation in external relations	

Table three: ANZSCO 6-digit occupation vs specialisation – Marketing Specialist and Pricing Analyst Specialist Tasks (list according to alphabetical order).

Not Elsewhere Classified (NEC) profiles

The addition of almost 300 new occupation profiles for more than 80 'Not Elsewhere Classified' (NEC) occupation groups also aligns the Classification more closely to ANZSCO. NEC occupation groups are groupings of small occupations that are not captured in another part of ANZSCO which share a similar skill level, and sometimes a similar skill set. For example, the NEC occupation group '139999 Specialist Managers NEC' contains 7 occupations – 'Airport Manager', 'Ambassador', 'Ambulance Services Manager', 'Archbishop', 'Bishop', 'Harbour Master' and 'Security Manager (Non-ICT)'.

Skills data for NEC occupations is not as comprehensive as for other profiles. It includes specialist tasks and technology tools, but not core competencies or the time that is generally spent by the occupation on each specialist task.

Like introducing specialisations, the incorporation of NEC profiles gives us more range to bring in new specialist tasks and technology tools that provide important context and enrich the Classification. For example, some of the new specialist tasks being introduced this release from our new NEC profiles include:

- Review audio or video recordings.
- Analyse risks related to investments in green technology.
- Develop exercise or conditioning programs.
- Teach online courses.

Improving our data

Removing BETA means that we are happy with the structure and approach to the Classification, but this does not mean we are finished expanding and updating our data. To the contrary, we want the Classification to be a dynamic dataset that is responsive to changes to occupations in the Australian labour market. We remain focused on improving our data as we speak to stakeholders and as we continue to monitor and interrogate Australian skills data and information.

Case study: Quantity Surveyors and Construction Estimators

We continue to receive feedback on the Classification from a range of stakeholders, including industry representative bodies, registered training organisations and professionals who provided feedback on their area of expertise.

An example of this feedback includes data improvement suggestions for the occupation '233213 Quantity Surveyor'. The feedback recommended a range of changes to the specialist tasks, core competencies and technology tools for this occupation.

We undertook research and validation activities and made the following changes to the specialist tasks, core competencies and technology tools for this profile:

ANZSCO 233213 Quantity Surveyor Estimates and monitors construction costs from the project feasibility stage, through tender preparation, to the construction period and beyond. Registration or licensing may be required.	
Specialist tasks at September 2021	Specialist tasks at March 2022
Analyse business or financial data	Analyse business or financial data
Assess the cost effectiveness of products, projects or services	Assess the cost effectiveness of products, projects or services
	Conduct financial audits
Confer with others about financial matters	Confer with others about financial matters
Confer with staff to coordinate business operations	
Develop business or financial information systems	Develop financial plans for clients
Establish business management methods	
Estimate costs of goods or services	Estimate costs of goods or services
	Estimate demand for goods or services
	Estimate green project costs
	Estimate operational costs
	Estimate technical or resource requirements for development or production projects
	Evaluate applicable laws and regulations to determine impact on organisational activities
	Evaluate designs or specifications to ensure quality
	Investigate the environmental impact of projects
Maintain data in information systems or databases	Maintain data in information systems or databases
Monitor financial indicators	Monitor financial indicators
Negotiate agreements to resolve disputes	Negotiate agreements to resolve disputes
	Negotiate contracts with clients or service providers
	Plan and manage, and analyse costs and benefits of, proposed designs or projects
	Prepare contracts, disclosures or applications
Prepare financial documents	Prepare financial documents
	Prepare operational progress or status reports

Table four: Data Improvements to the Quantity Surveyor profile – Specialist Tasks. Listed in alphabetical order, additional or adjusted tasks shown in green.

ANZSCO 233213 Quantity Surveyor Estimates and monitors construction costs from the project feasibility stage, through tender preparation, to the construction period and beyond. Registration or licensing may be required.	
Technology Tools at September 2021	Technology Tools at March 2022
Accounting software	
	Cost modelling software
Data base reporting software	Database reporting software
Data base user interface and query software	Database user interface and query software
Document management software	Document management software
Enterprise resource planning ERP software	
Project management software	Project management software
	Quantitative schedule & risk analysis software

Table five: Data Improvements to the Quantity Surveyor profile – Technology Tools. Listed in alphabetical order, additional technology tools shown in green.

ANZSCO 233213 Quantity Surveyor Estimates and monitors construction costs from the project feasibility stage, through tender preparation, to the construction period and beyond. Registration or licensing may be required.		
Core Competencies	Core Competencies Scores at September 2021	Core Competencies Scores at March 2022
Digital engagement	7	7
Initiative and innovation	7	8
Learning	7	7
Numeracy	7	8
Oral communication	7	7
Planning and organising	8	8
Problem solving	6	6
Reading	7	7
Teamwork	6	8
Writing	6	7

Table six: Data Improvements to the Quantity Surveyor profile – Core Competencies. Adjusted core competency scores shown in green.

In preparing these improvements, we also noted that feedback for the Quantity Surveyor occupation was relevant for the '312114 Construction Estimator' profile. We undertook similar research and validation and as a result, the following changes were made to the specialist tasks, core competencies and technology tools for Construction Estimator:

ANZSCO 312114 Construction Estimator	
Prepares and delivers estimates and cost plans for construction projects up to the tender settlement stage.	
Specialist tasks at September 2021	Specialist tasks at March 2022
Analyse business or financial data	Analyse business or financial data
Assess the cost effectiveness of products, projects or services	Assess the cost effectiveness of products, projects or services
Confer with others about financial matters	Confer with others about financial matters
Confer with staff to coordinate business operations	
Develop business or financial information systems	Develop financial plans for clients
Establish business management methods	
Estimate costs of goods or services	Estimate costs of goods or services
	Estimate green project costs
	Estimate operational costs
	Estimate technical or resource requirements for development or production projects
	Evaluate applicable laws and regulations to determine impact on organisational activities
	Investigate the environmental impact of projects
Maintain data in information systems or databases	Maintain data in information systems or databases
	Manage construction activities
Monitor financial indicators	Monitor financial indicators
Negotiate agreements to resolve disputes	Negotiate agreements to resolve disputes
	Negotiate contracts with clients or service providers
	Plan and manage, and analyse costs and benefits of, proposed designs or projects
	Prepare contracts, disclosures or applications
Prepare financial documents	Prepare financial documents
	Prepare operational progress or status reports
	Procure goods or services

Table seven: Data Improvements to the Construction Estimator profile – Specialist Tasks. Listed in alphabetical order, additional tasks shown in green.

ANZSCO 312114 Construction Estimator	
Prepares and delivers estimates and cost plans for construction projects up to the tender settlement stage.	
Technology Tools at September 2021	Technology Tools at March 2022
Accounting software	Accounting software
	Cost modelling software
Data base user interface and query software	Database user interface and query software
	Database reporting software
	Document management software
Enterprise resource planning ERP software	Enterprise resource planning ERP software
Project management software	Project management software
Graphics or photo imaging software	Graphics or photo imaging software

Table eight: Data Improvements to the Construction Estimator profile – Technology Tools. Listed in alphabetical order, additional Technology Tools shown in green.

ANZSCO 312114 Construction Estimator Prepares and delivers estimates and cost plans for construction projects up to the tender settlement stage.		
Core Competencies	Core Competencies Scores at September 2021	Core Competencies Scores at March 2022
Digital engagement	7	7
Initiative and innovation	7	8
Learning	7	7
Numeracy	7	7
Oral communication	7	7
Planning and organising	8	8
Problem solving	6	6
Reading	7	7
Teamwork	6	7
Writing	6	7

Table nine: Data Improvements to the Construction Estimator profile – Core Competencies. Altered core competencies scores shown in green.

We continue to welcome feedback on the Classification data to help facilitate similar improvements for other profiles and skills.

New skills, and improved skills and occupation profiles

As we bring new profiles into the Classification, we inevitably add new specialist tasks that bring greater context and richness to our data. This is not just the case for specialisations and NEC occupations as noted above, but for all profiles. As new data enters the Classification, we consider how it may apply to existing profiles, and we have made improvements to a number of profiles as a result of new data.

Case study: Bakers and Pastrycooks

For example, as part of this release we have added profiles for '351111 Baker', '351112 Pastrycook', and '851211 Pastrycook's Assistant' necessitating the creation of the new tasks:

- Produce pastries and other baked goods
- Decorate food items

We also amended the following existing tasks in the Classification:

- Apply glazes → Apply glazes or icing

As a result, we made amendments to '3511 Bakers and Pastrycooks' (the unit group for two of these three occupations), applying these tasks to the unit group profile where we considered they applied to the group as a whole. We also added some existing and

unaltered tasks that were backed up by research, and removed some tasks where other contextual tasks were better aligned with the occupations that make up the unit group:

ANZSCO 3511 BAKERS AND PASTRYCOOKS Bakers and Pastrycooks prepare and bake bread loaves and rolls, buns, cakes, biscuits and pastry goods.	
Specialist tasks at September 2021	Specialist tasks at March 2022
Adjust temperature controls of ovens or other heating equipment	Adjust temperature controls of ovens or other heating equipment
Apply glazes	Apply glazes or icing
Clean food preparation areas, facilities or equipment	Clean food preparation areas, facilities or equipment
Cut foods	
Determine food or drink production methods	
Direct operational or production activities	Direct operational or production activities
Evaluate quality of food, drinks or ingredients	Evaluate quality of food, drinks or ingredients
	Inspect facilities, equipment or supplies to ensure conformance to standards
Inspect food products	
	Load items into ovens or furnaces
Load materials into production equipment	Load materials into production equipment
Maintain production or processing equipment	Maintain production or processing equipment
	Manage preparation of special meals or diets
Measure ingredients	Measure ingredients
	Mix ingredients
Monitor equipment operation to ensure proper functioning	Monitor equipment operation to ensure proper functioning
Operate food preparation equipment	Operate food processing equipment
Order materials, supplies, or equipment	Order materials, supplies, or equipment
	Prepare breads or doughs
	Produce pastries and other baked goods
Record operational or production data	Record operational or production data
Shape dough	Shape dough

Table ten: Data Improvements to the Bakers and Pastrycooks profile – Specialist Tasks. Listed in alphabetical order, additional or adjusted tasks shown in green, removals shown in grey.

Case study: A new skills cluster

We have also made improvements to some of the skills clusters in the Classification. A notable change is the inclusion of a new skill cluster 'measure or calculate dimensions, distance, volume or capacity' to the 'science and mathematics' skill cluster family.

The tasks moved from existing clusters to this new cluster are outlined in the table below, and we anticipate that more tasks will be added to this cluster as new skills are brought into the Classification – particularly scientific occupations including spatial scientists.

Specialist Task	Previous Skill Cluster	Current Skill Cluster	Current Cluster Family
Measure distances or dimensions	Collect or analyse land surveys and geographics data	**NEW:** Measure or calculate dimensions, distance, volume or capacity	Science and Mathematics
Calculate dimensions of work pieces, products or equipment	Determining and configuring equipment and components		
Measure materials to mark reference points, cutting lines or other indicators	Evaluate physical or chemical characteristics of material		
Measure dimensions of completed products or work pieces to verify conformance to specifications	Inspect product quality or specifications		
Measure the level or depth of liquids	Maintain, adjust or repair flow systems		
Measure materials or objects for installation or assembly	Manage and handle resources and materials		
Measure product or material dimensions	Manage construction or production projects		
Measure work site dimensions			

Table eleven: Re-clustering of specialist tasks to form the new skills cluster "measure or calculate dimensions, distance, volume or capacity.

Updates to the technology tools data

When we first brought technology tools into the Classification, we based them on O*NET's 'Technologies and Tools' data and adjusted them for the Australian context. As we have continued to expand the Classification, we find the technology tools become quickly outdated, and as our data develops in maturity, we want to continue to integrate existing taxonomy data with information more focused on the Australian labour market.

We have made some adjustments that address some of the complications with the technology tools data. Specifically, we have:

- Created definitions for all technology tools – for example 'Data mining software' is 'software that identifies patterns, anomalies, and correlations within large data sets to predict outcomes.'

- Addressed some structural granularity issues with the technology tools, to ensure that across the Classification they are presented at similar levels of granularity.

- Made improvements based on qualitative research. For example, we found that for Electricians, the technology tool 'wattmeters' is inadequate and have expanded that technology tool to 'electrical and electronic systems measurement instruments'.

- Further analysed job advertisement data to identify technology tools that might be missing from current occupation profiles.

While we have focused on these priority improvements for this release, we will continue to review and make improvements to the technology tools going forward. We anticipate that the technology tools will be one of the most dynamic elements of the skills classification, reflecting the speed at which technology continues to change and shape the labour market.

The addition of emerging and trending digital skills

In December 2021, the Commission's report *State of Australia's Skills 2021: now and into the future* (National Skills Commission, 2021)[4] outlined how emerging and trending skills are changing the nature of work across many roles and driving growth in emerging occupations. Understanding which skills are trending and emerging in the labour market provides an opportunity to better equip the workforce with skills that align to those emerging jobs, as well as developing new skills that are emerging within jobs. The commission analysed and identified these skills in the labour market using job advertisement data by EMSI Burning Glass.

Trending skills are defined as skills that have grown in demand over the past five years (2016 to 2021) in a particular occupation. They are not necessarily new skills, but skills that are increasing in demand as a proportion of all jobs advertised for that occupation over a five-year period.

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[4] National Skills Commission, 2021, *State of Australia's Skills 2021: now and into the future*, National Skills Commission, Australia.

Emerging skills are **trending skills** that are also new to particular occupations. These are distinct from other trending skills in that they have recently emerged in some occupations where they were not previously identified in job advertisements for that occupation within the last five years.

The Commission has found that digital skills are amongst the fastest growing emerging skills in the economy. As part of this update to the Classification we mapped identified skills to specialist tasks and technology tools in the Classification and introduced flags for emerging and/or digital skills into our profiles. These flags appear both in the Classification interface and the downloadable data file.

It is important to note that the emerging and trending digital skills flagged as part of this update extend beyond technology tools or specialist tasks relating solely to the use or application of software and hardware. Specialist tasks related to project management, communication and collaboration, science and mathematics, engineering and creative design have also been included as they facilitate and complement working with digital tools and in work environments that are becoming more digitised. As part of this process, over 1000 trending or emerging skills flags were added to profiles in the Classification.

We intend to include emerging and trending skills flags beyond digital skills in future updates to the Classification, and the flags will also be updated as these trends change into the future. This introduces an exciting new element of dynamism into the Classification which enhances its responsiveness to a changing and evolving Australian labour market.

Case study: Architectural Draftsperson

For example, the profile for '312111 Architectural Draftsperson' has been updated per the table below with the introduction of flags for 1 emerging and 5 trending skills[5].

312111 Architectural Draftsperson *Completes Architects' concepts by preparing drawings and plans, and liaising with builders and contractors.*	
Specialist tasks	
Analyse design or requirements information for mechanical equipment or systems	Trending
Collect data about project sites	
Create graphical representations of structures, landscapes or aquatic systems	Trending
Create physical models or prototypes	
Determine operational methods	
Direct design or development activities	Trending
Estimate operational costs	
Estimate technical or resource requirements for development or production projects	
Evaluate technical data to determine effect on designs or plans	
Monitor processes for compliance with standards	
Operate computer systems	
Prepare contracts, disclosures or applications	
Prepare technical reports for internal use	
Provide technical guidance to other staff	
Recommend technical design or process changes to improve efficiency, quality or performance	Trending
Supervise engineering or other technical staff	
Verify mathematical calculations	
Technology tools	
Computer aided design CAD software	Trending
Document management software	
Graphics or photo imaging software	Emerging

Table eleven: Occupation profile for Architectural Draftspersons with flags for emerging and trending digital skills. Tasks in alphabetical order by category.

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[5] Note: the addition of an emerging skills flag does not necessarily indicate a difference between this release of the Classification and any previous release, given the difference in data timeframes and other technical factors. For example, the Classification draws on datasets including current job advertisements while emerging and trending skills data relates to changes to occupations over the five years between 2016 and 2021.

What's next?

The six months ahead of our next data release will be busy, as we work hard to bring you more profiles and skills and continue to make data improvements.

As always, we welcome your continued engagement with, and feedback on, the Classification – and we encourage you to reach out to us on this exciting and evolving piece of data infrastructure.

To provide feedback or engage with us on the Australian Skills Classification, please visit: https://www.nationalskillscommission.gov.au/australian-skills-classification-feedback

You can also email us at: skillsclassification@skillscommission.gov.au