Artisanal Food & Beverage Project



Summary of Feedback, Responses and Actions on proposed *Certificate IV in Fermented Food & Beverages* qualification

April 2019

Draft qualifications, units of competency and skill sets for the Artisanal Food & Beverage project were made available on the <u>Skills Impact website</u> for stakeholder review from 29 January – 4 March 2019. (<u>Visit the website</u> to view a full list of the documents that were submitted for consultation during this phase.)

Feedback received during this period indicated overall support for a qualification in brewing and distilling in particular. However, the list of core and elective units in the draft of the *Certificate IV in Fermented Food and Beverages* qualification were not yet meeting industry needs. To address this, considerable changes have been made to the qualification, including:

- Title updated to Certificate IV in Artisan Fermented Food and Beverages
- Total number of units increased from 20 to 22 to allow more flexible packaging
- Fermentation specialisation removed (some fermentation units included in core, and fermentation aspects strengthened in other units) and replaced with new Fermentation Skill Set
- Brewing and distilling specialisations reviewed and updated
- Proposed new units added.

In addition to these qualification changes, 9 new units of competency and 2 new skill sets are proposed for development.

Below is a summary of the issues raised for the *Certificate IV in Fermented Food and Beverages* qualification, and how these issues have been dealt with. This involves a consideration of the information provided, views of industry stakeholders and from people who are part of the Subject Matter Expert Working Group process. Resolutions are constructed to take into account the needs and views of stakeholders to the extent possible, and to comply with the *Standards for Training Package 2012*. The resolutions may represent a compromise on one or more stakeholder views with the aim of a workable outcome for industry, State and Territory Training Authorities (STAs) and training providers.

Drafts of the *Certificate IV in Artisan Fermented Food and Beverages*, the additional 9 new units of competency and 2 new skill sets are available to view on the <u>Skills Impact</u> website as part of a second draft consultation phase which will run from **8 April** to **30 April 2019**. Following this additional phase, all drafts will be reviewed and made available once again for a Validation phase, along with a sum

Summary of feedback on draft of *Certificate IV in Fermented Food & Beverages*

(now Certificate IV in Artisan Fermented Food and Beverages)

Comments related to Core Units

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution	
• Industry, VIC	<i>RE: Core unit - FBPTEC4XX1 Manage raw materials</i> "perform basic analytical testing of raw materials, in process products, and finished goods"	Adopted - 'Perform basic analytical tests' added as a PC - also note units on Perform basic tests, and testing that is incorporated into practical, task specific, units.	
• Industry, SA	RE: Core unit - FBPTEC4006 Apply an understanding of legal requirements of food production This is a really important one. Needs to cover excise as well for beer/spirits.	Yes - agreed. A new unit covering regulatory requirements for the production of alcohol has been developed and added to the Distilling and Brewing specialisations.	
Industry, NSW	<i>RE:</i> Core units Need to cover excise, barcodes, warning information, standard drinks, weights and measures, 10C deposit information	Yes - agreed. FBPFST4009 Label foods according to legislative requirements has been added to the core, and some of this information is also covered in the new unit about FBPTEC4XX6 Apply an understanding of legal requirements of food production.	
• Industry, QLD	RE: Core unit - MSMENV272 Participate in environmentally sustainable work practices By no means is this irrelevant, but it should be relegated to an elective unit. Surely it would end up overlapping with basic legal environmental standards covered int FBPTEC4006.	Yes - agreed. This unit has been moved to the elective bank.	
• Industry, QLD	<i>RE: Core units</i> Maintenance of Workplace Hygiene must be one of the most universally-applicable topics in food science and should therefore be its own core unit.	Yes - agreed. At AQF4, this information is included in <i>FBPTEC4003 Control food</i> contamination and spoilage and reinforced in practical task based units.	
• Industry, QLD	RE: Core unit - FBPTEC4XX1 Manage raw materials This seems far too vague. Raw materials are at the heart of all artisanal production and will vary from product to product. Understanding the raw materials themselves is far more important (for example, how is a brewer meant to understand a Certificate of	Suggestion adopted. Further content added to the Knowledge Evidence of this unit including Certificates of Analysis and water.	

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	Analysis of malt at intake if they don't understand the parameters they're supposed to be desiring?).	
• RTO, SA	<i>RE: Core units</i> FBPPPL4002 should not be a core unit - fermented products (other than brewing or distillation products) often don't have complex equipment - this is a fermentation qualification	Suggestion adopted - unit moved to elective bank.
• RTO, VIC	<i>RE: Core units</i> FBPPPL4002 Not sure this one belongs in core, agree with [above comment] that some equipment may not require this complexity, perhaps better as an elective.	Suggestion adopted - unit moved to elective bank.
• RTO, SA	<i>RE: Core units</i> Develop and maintain a HACCP based food safety plan should be in the core - swap this for the control food contamination unit	Suggestion adopted - 'Develop and maintain food safety plan' included in core and the AQF 4 unit moved to elective bank.
• RTO, VIC	<i>RE:</i> Core units These core units seem to suit only a owner/manager role of a micro (smaller) fermenting business whether food or beverage. E.g. if there was only 3 staff in the business only one person would do all of these things.	Suggestion adopted - core units revised to be more targeted toward owner/manager of artisanal food production business.
 Industry, Tas 	sensory is good to have as a core in the Cert IV as this is important for artisanal	Agreed - the unit remains in the core.
 Industry, Tas 	<i>RE: Core Units</i> FBPTEC4003 Control food contamination and spoilage – probably not as essential for distilling.	The consensus from discussing this with representatives from industry and the SMEWG during the development of the qualification is that it wouldn't hurt for distillers to have skills and knowledge in this area.
• Industry, VIC	Good to have cleaning unit in the core	Agreed - 'Control food contamination and spoilage' remains in core.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO & Industry, NSW	Some discussion around business units being in the core. Over half of students are undertaking similar qualifications to start their own business. But overall consensus was the BSB units should be elective as not always relevant	Agreed - BSB units/business plan unit remain in elective bank.
• Industry, SA	Develop and maintain a HACCP based food safety plan should be in the core	Agreed - this unit has been added to the core and the AQF4 unit moved to electives.
• RTO, SA	Maintenance unit should not be core. Not a lot of production equipment in some of the fermenting processes. Make elective.	Suggestion adopted - maintenance unit moved to electives.
• RTO, SA	Schedule and manage production unit should not be core	Suggestion adopted - unit moved to elective bank.
• Industry, SA	Disagree [with above] - Schedule and manage production should be in the core- it is critical to use product within a specific time frame. Raw materials unit does not cover this	Other industry subject matter experts do not share this view - unit moved to elective bank.
• RTO, VIC	<i>RE: Core units</i> Not sure about the maintenance unit as a core as not everyone will have a process that requires this level of qualification. I guess this is tricky because of the broadness of the qual. Even a micro brewer can have a very basic operation to brew.	Suggestion adopted - maintenance unit moved to elective bank.
• Industry, SA	Suggest removing FBPTEC4006 Apply an understanding of legal requirements of food production from core and putting in fermenting specification	Other industry subject matter experts do not share this view - unit remains in core.

Comments related to Qualification coverage/title

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution	
• RTO, VIC	<i>RE: Qualification coverage</i> The production of fermented food vs beverage production are vastly different processes. Are you sure you want package the two together? Too broad I think. This comment applies to the qualification description	Agreed - qualification reworked to focus on artisanal setting with just two specialisations (Distilling and Brewing). The qualification without the specialisations remains to focus on food.	
• Gov, WA	The main query in Western Australia is the size of the market for these qualifications and the likely demand for training in a very niche area. The workshop that took place in Perth focussed on Brewing, as the participants were from that industry, and they raise specific issues related to brewing that will need to be considered.	Suggestions from all workshops across Australia recorded and addressed. Full summary document of feedback received on all drafts will be available in the Validation phase.	
• Industry, WA	Cert IV would work nicely for someone who wants to move in to more of a supervisor/team leader role. Would like to see a Cert III level as well – less hands on etc. that doesn't worry about production numbers etc.	Yes - Skills Impact have a work order for revising the Food Processing qualifications - the Certificate III will be addressed in that project that will commence mid-year. Please stay in touch.	
• Industry, QLD	If there is any feedback I would want to give would be with the name i.e"in Fermented Food and Beverages" We got together to talk about a Brewing (and Distilling qualification). To me the name does not depict this. I would prefer the name to be "in Brewing and Distilling", even though it would be Brewing or Distilling in many cases. I cannot fully recall if we included or excluded a the process to produce for eg a beverage like Kombucha. If we did, then I can half understand the name, but I thought the focus was on Brewing in our group. And hence the name I propose talks directly to this core capability in the Cert and to me is more marketable too.	The title of the qualification is "Fermented Food and Beverages" as it does indeed cover brewing, but also distilling and other fermented products such as kombucha, table olives, miso etc. We have built the qualification to include specialisations so that if someone wanted to do the qualification for a brewing focus, their certificate at the end would read " <i>Certificate IV in Artisan</i> <i>Fermented Food and Beverages (Brewing)</i> ". (The same is true for distilling). We agree it would be nice to have a qualification just called "Brewing" but so many of the core skills apply across multiple disciplines and we would end up with duplicated qualifications (which the system will not permit). By having the specialisations in the one qualification and allowing these to be listed in the title, we hope this helps address that concern.	
• RTO, VIC	We had a meeting with [industry organisation] in January and they were very excited about the prospect of a Cert 4 in Brewing as it would be a a great progression possibly from the Cert III in Food Processing we were doing with a brewing focus. This was until I showed them the package and the need for a student to work	The focus of this project is to be artisanal food production and the qualification has been renamed to ensure clarity. It could be a pathway from the Certificate III in Food Processing for some, otherwise perhaps the Certificate IV in Food Processing is a better option for a manufacturing setting.	

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	across the entire business, with managerial responsibility, and they were disappointed that this will not be an option for them.	
• RTO, VIC	Very broad description and realise it needs to be as there is a massive difference between making beer versus making sauerkraut in terms of processes, equipment ect. It's a shame they can't be two different qualifications.	The qualification has been revised so that the discrete outcomes are clearer.

Comments related to Packaging Rules

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
 Industry, NSW 	<i>RE: Packaging Rules</i> Some level of chemistry and biology science is required	Suggestion adopted - new unit titled 'Identify the microbiological and chemical properties of fermented foods' added to core.
• Industry, QLD	<i>RE: Packaging Rules</i> All of Group C should be compulsory for all students.	Suggestion adopted - more emphasis on fermenting added to core through the units 'Identify the microbiological and chemical properties of fermented foods' and 'Manage and propagate yeast'.
• RTO, SA	<i>RE: Packaging Rules</i> if you are doing a non brewing/distillation qualification ie fermented foods there are only 2 units in group C to choose so you are forced to do 2 brewing and/or distillation units which are not applicable - need a minimum of 4 units in the fermented food (group c).	Agreed - 'fermentation' specialisation removed.
_	General Packaging rules say first 4 units can be from A,B,C, but if doing fermenting, no relevant units at the moment from the other groups. Need more units in Group C.	

Comments related to Qualification level

Stakeholder Comm	nents and Identified Issues	Consideration and Proposed Resolution
 Industry, NSW 	<i>RE: Qualification level</i> We believe this should be a Diploma level qualification	When we analysed the level of the job tasks, or units, they align to the Australian Qualifications Framework (AQF) level 4, where workers are using "broad, factual, technical and theoretical knowledge in a specialised field",
• Industry, QLD	<i>RE: Qualification level</i> Agree with [above comment] that this should be a Diploma-level qualification. There is otherwise nothing comparable at that level in this country and the scope of the subject matter is certainly there.	along with "specialist technical skills to complete routine and non-routine tasks and functions" "cognitive skills to identify, analyse, compare and act on information from a range of sources" quoted from the Australian Qualifications Framework 2011.
• Industry, NSW	Why are Brewing and Distilling at Certificate IV level and Cheese at Diploma?	See above The job tasks, or units, in the Cheese qualification align better to the descriptors at AQF 5 in the Australian Qualifications Framework 2011.
• RTO & Industry, NSW	If working in an artisan facility, you are responsible for everything. Maybe Diploma level more suitable?	See above. Some small business units are added to the electives - they are also at AQF4.
• RTO & Industry, SA	If looking at hiring someone to set up/run brewery, would want a Diploma. It's controlling the operating of the business. Even in Artisanal, it's small teams, which requires broader knowledge	
• RTO, SA	Seems to be a lot of crossover with Diploma of Food Science and Technology	The core units have been revised to make more distinct from each other qualification includes many new units at AQF4.

Comments related to Elective units – Brewing specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution	
• Industry, SA	<i>RE: Elective units - brewing specialisation</i> Is packaging covered at all. Maybe in preventing spoilage. Pick up of dissolved oxygen is a big issue. this might be covered in food spoilage or transfer operations but to me would make sense to discuss in a packaging context because that is where the biggest risk of dissolve oxygen pick up generally occurs and all beers are going to need to be packaged in one form or another (bright tank, keg, can or bottle).	Suggestion adopted. There is a new unit added to the brewing specialisation - Manage filling and packaging of fermented beverages, which covers dissolved oxygen.	
• Industry, NSW	<i>RE: Elective units</i> We feel that there should be one Beer Filtration UOC that covers plate and frame, DE, lenticular and centrifuge	Suggestion adopted. There is a new unit added to the brewing specialisation - <i>Filter fermented beverages</i> , which incorporates these methods	
• Industry, NSW	RE: Elective units - Brewing specialisation - FBPCEL2009 Carry out transfer operations This should be replaced with the FBPBPG4XX1 Manage A BEER Packaging Process which covers Kegging, Bottling and Canning. Some focus on the role of pasterisation and dissolved oxygen must be included in this UOC	Suggestion adopted. There is a new unit added to the brewing specialisation - Manage filling and packaging of fermented beverages, which covers kegs, bottles and cans, also dissolved oxygen and pasteurisation.	
• Industry, NSW	RE: Elective units - brewing specialisation Need to add a 4 Level Yeast Management UOC	Suggestion adopted - new unit titled 'Manage and propagate yeast' added to core.	
• Industry, QLD	<i>RE: Elective units - brewing specialisation</i> If these electives are given equal weighting, they're extremely disproportionate to their relevance to the craft. A unit on "Raw Materials" is critical before the Wort can even be produced.	The sequence of delivery is up to the RTO to determine in their training and assessment strategy. The Companion Volume will include some information about suggested delivery sequences.	
• Industry, QLD	RE: Elective units - brewing specialisation - FBPCEL2009 Carry out transfer operations Many artisanal breweries won't even have 'transfer operations'. This unit would be better served by covering packaging overall.	Suggestion adopted - unit moved to elective bank.	

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, QLD	<i>RE: Elective unit FBPCEL2009 Carry out transfer operations</i> Why is this elective code identical for both Brewing and Distilling? Why not make packaging a core subject? Even though there are bound to be differences between carbonated and non-carbonated liquids.	Suggestion adopted - unit moved to elective bank. Units should always be contextualised to suit need/context.
• RTO, VIC	RE: Elective units - brewing specialisation - FBPTEC4XX2 Manage wort production Very big unit here, what if the brewer does not mill their own grain? Can't use this elective	Agreed - it is a big unit. Even if a brewer does not mill their own grain, in an artisanal setting it's still worth training around this topic so that candidates know what the process entails.
• RTO, VIC	<i>RE: Elective Units - Brewing specialisation</i> There are only 3 listed but jammed packed with lots of equipment and processes. E.g. what if in wort production unit you do not have a mill but buy your milled malt in? Or if you do not have a lauter tun? With cellar operation – what if you do not filter? (cloudy beers), some buy in their yeast other propagate??	Suggestion adopted - some of the equipment specific language has been removed from the unit about wort production (e.g. lauter ton has been removed from PCs), and the element on filtering has been removed (and new unit created).
• Industry, QLD	<i>RE: Brewing units</i> "Operate the pressing process" doesn't fit "Operate the reverse osmosis process" doesn't fit	Suggestion adopted. The two units referred to have been removed from the elective bank.

Comments related to Elective units – Distilling specialisation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO & Industry, NSW	<i>RE: Elective units - distilling specialisation</i> Blending Spirits just with spring water or turning it into a Liquere with the addition of sugar and what legal requirement is in place for that to call it a liqueure.	Suggestion adopted. Information added to 'Blend spirits' unit (and also some info in Apply regulatory requirements to the production of alcoholic beverages).
• RTO, SA	<i>RE: Elective units - distilling specialisation</i> none of these distilling units have any component of fermentation - these are all processes post fermentation. Students could in fact do a Distilling or brewing streams without even covering fermentation at all	Suggestion adopted. Units on fermentation added to core and Manage wort production for distilling and Manage cellar operations added to Distilling specialisation.
• Industry, SA	Maintenance, excise, operate still are all Distilling core requirements. Cellar ops for brewing needs to really be in distilling spec too, otherwise there's no fermentation part of distilling.	Suggestion adopted - <i>Manage cellar operations</i> added to Distilling specialisation.
• Industry, SA	Management of hazardous materials needs to be fleshed out more – should be core in distilling, or embedded prominently in these distilling units	Suggestion adopted - emphasis on hazardous materials/PPE added to distilling specific units.
• unknown	<i>RE: Elective units - distilling specialisation</i> I would have thought that all "electives" A,B,C & D are all crucial steps in distilling and not ones that could be "electives" or left out.	Yes, all the units in a specialisation would be mandatory if the candidate chooses to undertake a qualification with a specialisation. The packaging rules have been reworked so hopefully clearer now.
 Industry, Tas 	Produce wash for distilling might not be suitable in distilling as not all distillers do it	Agreed, but others think it would be reasonable for distillers to learn about it (see comment below).
 Industry, Tas 	Expect someone learning to be a distiller would need to know how to do this skill (produce wash for distilling). Would suggest keeping it in.	Suggestion adopted - 'Produce wash' unit left in Distilling specialisation.

Comments related to Elective units - F	Fermenting specialisation
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Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO & Industry, NSW	RE: Elective units - fermenting specialisation - FBPTEC4XX9 Prepare for fermentation Does FBPTEC4XX9 cover all sources of fermentable product (eg. Grain, Potato, Sugercane, Molasses, Grape, Fruit)	They could be covered in FBPTEC4XX9, but 'potato, sugar cane, molasses, grape, fruit' have been added to FBPTEC4XX6 Produce wash for distillation.
• RTO, SA	<i>RE: Elective units - fermenting specialisation</i> the units in group c should be core units as the qualification is a fermentation qualification	Suggestion adopted - qualification reworked so that core now includes units covering fermentation. Fermentation specialisation removed and covered in a new skill set.
• Gov, WA	Fermented meat should be added to this qualification. Could also have a fermented meat skill set	Suggestion adopted - new unit titled <i>Produce fermented meat products</i> added to elective bank.
• RTO, SA	<i>RE: Elective units - fermenting specialisation</i> Group C should include fermented meat production	
• RTO, SA	Fermented meats should be included. There is a unit in the AMP Meat Processing Training Package but it does not cover everything needed.	

Comments related to Elective units – General comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, SA	RE: Elective unit SIRRFSA001 Handle food safely in a retail environment I wouldn't have this as an applicable elective in this manufacturing certificate. Food safety for beer and spirits is really handled at the production side and there isn't much you can do in a retail setting to really impact on that.	This unit was originally proposed for inclusion by the SMEWG, suggesting it be added as an elective to cover the need to serve food/conduct tastings at an artisanal production site. This was again raised later during the consultation workshops, with industry saying there is a need for multi-skilled workers who can participate/manage the artisan food/beverage production, as well as being able to participate in retail activities if required. (An additional new unit titled 'Prepare and present artisanal food and beverages' has also been added to the elective bank to support this need, along with a new skill set <i>FBPSSXXX8</i> <i>Present Artisan Food and Beverages Skill Set.</i>) This unit - <i>SIRRFSA001 Handle food safely in a retail environment</i> - is included as an elective in this qualification which means it is not compulsory for delivery. Candidates may choose to undertake this unit if it is relevant to their learning needs. (A note that <i>FBPTEC4006 Apply an understanding of legal requirements of food production</i> is in the core of the qualification and covers food safety at the production side.)
 Industry, NSW 	RE: Elective unit SIRRFSA001 Handle food safely in a retail environment Agree with [above comment]	
• Industry WA	RE: Elective unit SIRRFSA001 Handle food safely in a retail environment Agree with [above comment]	
• Industry, WA	I would like to see some elective units around sales and marketing.	Some business units already in elective bank. Packaging Rules allow for selection of 3 units of competency from other training packages - further advice on other potentially suitable sales/marketing units will be provided in the Companion Volume Implementation Guide.
• Industry, SA	<i>RE: Elective units - Other electives group</i> The three electives involving separation/filtration and even RO shouldn't all be able to be picked in order to provide a good cross section of understanding in the craft industry. There is too much else to know to be competent.	Suggestion adopted - the separation/filtering units have been removed from the elective bank.
• Industry, QLD	RE: Elective unit FBPTEC3001 Apply raw materials, ingredient and process knowledge to production problems All this seems to do is go over old ground covered by any assessment of the core units based around Quality Control.	There's a bit of a difference with this unit in that it focuses on identifying problems with raw materials - also acknowledge some cross-over - if it's chosen as an elective it could be clustered for delivery.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, QLD	<i>RE: Elective unit FBPFST5008 Develop a new food product</i> Should be utilised as a compulsory summary assessment for all artisanal producers, as a means for students to apply all the knowledge they have acquired.	This feedback was considered by the SMEWG and concluded that this unit will not be relevant for all candidates, so they have decided that it remains as an optional elective. They did however agree that RTOs may choose to deliver this unit in the way you have suggested.
• Industry, QLD	RE: Elective unit FBPCEL3009 Operate the crossflow filtration process This seems too niche and could otherwise be covered under raw materials and/ or packaging units.	Suggestion adopted - this unit has been removed from the elective bank.
• Industry, QLD	RE: Elective unit SIRRFSA001 Handle food safely in a retail environment Not relevant for beverage technologies, unless it were to be around bar line setup principals for beer.	Other stakeholders have requested this unit be included as an elective to cover the need to serve food/tastings at an artisanal production site and are fully aware that it won't be relevant for all users.
• Industry, QLD	RE: Elective unit - FBPCEL3011 Operate the reverse osmosis process This seems too niche and could otherwise be covered under raw materials and/ or packaging units.	Suggestion adopted - this unit has been removed from the elective bank.
• Industry, QLD	RE: Elective unit FBPFST4009 Label foods according to legislative requirements This should be able to be covered under FBPTEC4006.	This unit specifically emphasises legislative requirements related to labelling products, whereas <i>FBTEC4006 Apply an understanding of legal requirements of food production</i> is much broader unit and covers multiple areas include Food Standards Code, WHS/OHS, import/export legislation etc. as they apply to the workplace. The units could be delivered together to address any cross-over in content.
• Industry, Tas	<i>RE: Elective unit MSL922001 Record and present data</i> How is this meant to be an entire unit? Wouldn't it be implicitly taught and then assessed throughout all other units? If a candidate can't record and present data, they presumably won't pass any other unit.	It's an AQF level 2 unit, and some of the content does cross-over with practical units where details need to be recorded. It allows for some extra focus in this area should candidates require it.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, SA	RE: Elective unit FBPFSY5001 Develop a HACCP-based food safety plan This should just be incorporated into the core unit FBPSY4001.	FBPFSY5001 has been moved to the core, and FBPFSY4001 now an elective. (see comments in <i>Core Units</i> section of this document).
•	Add business plan unit to electives in Cert IV AND also 'start-up' skill set	Suggestion adopted - 'Develop and review a business plan' unit added to elective bank and FBPSSXXXX7 Establish an Artisan Food or Beverage Business Skill Set has been developed.
•	Maybe have a "business operations" style grouping in the qualification?	Trying to keep the focus on artisanal food. The Companion Volume Implementation Guide will include details about 'business operations' units/skill sets that may be undertaken to develop skills in this area.

Comments related to Elective units – Entry Requirements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, QLD	<i>RE: Entry Requirements</i> Could there not at least be a prerequisite of basic numeracy and literacy skills? At the very least, having passed subjects in Year 10 would be relevant. Chemistry and biology will help, but should not necessarily be prerequisites, as they can be taught at this level.	Entry requirements bring many issues and can create unintended barriers. Robustness is built into units instead. Some advice about skills of potential learners will be provided in a Companion Volume.
• RTO, SA	Build in the robustness in the units and quals themselves, not as an entry requirement.	Agreed.

General qualification comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
• Industry, QLD	General comment Beverage Technology alone would be a hard enough qualification to teach but would at least have wide-ranging applications. Whether the liquid is fermented or not should not have to be the limiting factor. Food should be removed from this qualification.	Comments noted - the qualification has been reworked so that the specialisations are only for Brewing or Distilling. A general <i>FBP4XX19 Certificate IV in Artisan Fermented Food and Beverages</i> could be delivered to address artisanal food production.
• RTO, SA	<i>RE:</i> General Comments Interesting that this is a qualification in fermentation yet there is no fermentation microbiology and biochemistry content at all - small amount of micro in control food contamination and spoilage unit but this is not the right perspective. At a Cert IV level there needs to be an understanding of the fermentation and biochemistry processes and the microbes involved	Suggestion adopted. The core now includes new units titled <i>Identify the microbiological and chemical properties of fermented foods</i> and <i>Manage and propagate yeast.</i> Wort units also include coverage of fermentation.