

## Information sheet for proposed FBP40X18 Certificate IV in Food Manufacturing

This qualification reflects the role of workers who apply knowledge and skills in food manufacturing to food processing, food safety auditing and to supervisory roles in the food processing environment. Workers contribute technical skills and knowledge to solve food production problems. Emphasis is on monitoring the implementation and quality control of food processing systems and procedures for optimal performance.

This qualification offers optional specialisations in Food Processing, Team Leadership, Food Safety Auditing and Cheese Making.

### Core Units

Core units cover the key functions of the job roles targeted by the qualification.

Unit code	Unit title	Summary of unit content
FBPFST4003	<b>Apply digital technology in food processing</b>	Use computer applications in food processing workplace to measure operating parameters and output. Knowledge of: <ul style="list-style-type: none"> <li>relevant software packages</li> <li>problem solving methods</li> </ul>
FBPFST4004	<b>Perform microbiological procedures in the food industry</b>	Performing basic microbiological tests, setting up a microscope Knowledge of: <ul style="list-style-type: none"> <li>aseptic techniques</li> <li>basic microbiology as it relates to food</li> </ul>
FBPFSY4001	<b>Supervise and maintain a food safety plan</b>	Supervise and maintain a critical control point (CCP) based food safety plan Knowledge of: <ul style="list-style-type: none"> <li>CCP approach to quality control</li> <li>common microbiological, physical and chemical hazards to food safety, and related control methods</li> <li>recall and traceability requirements</li> </ul>
FBPTEC4003	<b>Control food contamination and spoilage skills</b>	Control contamination and spoilage and manage food safety using cleaning and sanitation programs Knowledge of: <ul style="list-style-type: none"> <li>Composition and function of raw ingredients</li> <li>Common causes of contamination</li> <li>Methods used to confirm quality</li> <li>Trouble-shooting techniques</li> </ul>
FBPTEC4007	<b>Describe and analyse data using mathematical principles</b>	Numeracy skills for analysis of food measures and test data, control limits, standard deviations
BSBWHS401	<b>Implement and monitor WHS policies, procedures and programs to meet legislative requirements</b>	Overseeing WHS requirements of a team
MSL974003	<b>Perform chemical tests and procedures</b>	Carry out chemical tests Knowledge of: <ul style="list-style-type: none"> <li>Chemistry principles and concepts, including elements, compounds, ions, atoms, molecules, bonding;</li> <li>periodic table and symbols of elements</li> <li>principles and concepts related to equipment and instrument operation, tests and/or procedures</li> </ul>
MSMENV472	<b>Implement and monitor environmentally sustainable work practices</b>	Understanding and applying environmental legislation, regulations, guidelines and codes of practice to a workplace to improve resource usage and improve efficiency targets

## Elective units

Elective units provide optional choices for learning and assessment to complete the qualification. The qualification specifies the rules for how many units can be chosen.

Unit code	Unit title	Summary of content of unit
<b>FOOD PROCESSING</b>		
FBPFST4001	<b>Apply food processing technologies</b>	Carry out and review the following processes: fermentation, concentration, cooking and steaming Knowledge of: <ul style="list-style-type: none"> <li>• biochemical principles related to processes</li> <li>• major micro-organism groups used in fermentation</li> <li>• microbial growth</li> <li>• Food Standards Code</li> </ul>
FBPFST4003	<b>Apply digital technology in food processing</b>	Use computer applications in food processing workplace to measure operating parameters and output. Knowledge of: <ul style="list-style-type: none"> <li>• relevant software packages</li> <li>• problem solving methods</li> </ul>
FBPFST4005	<b>Document processes and procedures for a food product</b>	Write procedures for food processing operations Knowledge of: <ul style="list-style-type: none"> <li>• theory behind each major operation including material transfer, separation, size reduction, combining, heat exchange, biochemical transformation, shaping and extrusion</li> </ul>
FBPPPL4002	<b>Plan and coordinate maintenance</b>	Monitor maintenance activities Knowledge of: <ul style="list-style-type: none"> <li>• basic maintenance approaches and differences between reactive, preventative and proactive maintenance models</li> <li>• enterprise policies and procedures</li> </ul>
FBPPPL4004	<b>Optimise a work process*</b>	Identify, assess and monitor a work process and make recommendations for improvement Knowledge of: <ul style="list-style-type: none"> <li>• process/workflow mapping purpose and techniques</li> <li>• criteria against which to assess performance</li> </ul>
FBPPPL4005	<b>Establish process capability*</b>	Collect and analyse data to determine process capability Knowledge of: Data analysis methods including statistical analysis, developing data sampling plan establishing upper and lower limits of capability
FBPTEC4004	<b>Apply basic process engineering principles to food processing*</b>	Overseeing equipment used for heat transfer, refrigeration, pumping, evaporation and drying Knowledge of: Features and components of pumps, drying equipment, evaporation equipment
FBPTEC4006	<b>Apply an understanding of legal requirements of food production</b>	Covers knowledge of legislation and regulations that relate to food safety, includes Food Standards Code and WHS
FBPTEC4008	<b>Apply principles of food packaging</b>	Plan and improve packaging for food items Knowledge of: <ul style="list-style-type: none"> <li>• legal requirements relating to packaged product, including Food Standards Code</li> <li>• pathogens and spoilage that can occur in packaged food</li> </ul>

Unit code	Unit title	Summary of content of unit
		<ul style="list-style-type: none"> <li>properties of different packaging and interactions with food products</li> </ul>
FBPTEC4009	<b>Identify the physical and chemical properties of materials, food and related products</b>	<p>Use common tests and measures to identify the components of food, identify characteristics of acids and bases and their application in food processing, identify the basic molecular structures of carbohydrates, proteins and fats</p> <p>Knowledge of:</p> <ul style="list-style-type: none"> <li>physical and chemical characteristics and phenomena that occur during processing of food</li> <li>chemical reactions</li> <li>molecular structures</li> <li>pH</li> <li>solutions, suspensions and colloidal</li> </ul>
FBPTEC4011	<b>Participate in product recalls*</b>	<p>Identify criteria to recall a product, initiate controls to prevent product recall</p> <p>Knowledge of:</p> <ul style="list-style-type: none"> <li>legal responsibilities and requirements for recalls</li> <li>risks, measure and circumstances that could result in product recalls</li> </ul>
<b>TEAM LEADERSHIP</b>		
BSBCOM403	<b>Provide education and training on compliance requirements and systems</b>	Units focus on team leadership and process improvement
BSBMGT401	<b>Show leadership in the workplace</b>	
BSBRES401	<b>Analyse and present research information</b>	
BSBSMB401	<b>Establish legal and risk management requirements of small business</b>	
MSS403013	<b>Lead team culture improvement</b>	
MSS403040	<b>Facilitate and improve implementation of 5S</b>	
MSS403041	<b>Facilitate breakthrough improvements</b>	
MSS404053	<b>Use six sigma techniques*</b> <i>MSS404052A Apply statistics to operational processes</i>	
<b>FOOD SAFETY AUDITING</b>		
FBPAUD4001	<b>Assess compliance with food safety programs</b>	Audit units from National Regulatory Food Safety Auditor Guideline (low, medium and high risk)
FBPAUD4002	<b>Communicate and negotiate to conduct food safety audits</b>	
FBPAUD4003	<b>Conduct food safety audits</b>	
FBPAUD4004	<b>Identify, evaluate and control food safety hazards</b>	
FBPAUD4005	<b>Audit bivalve mollusc growing and harvesting processes*</b>	
FBPAUD4006	<b>Audit a cook chill process*</b>	
FBPAUD4007	<b>Audit a heat treatment process*</b>	
FBPAUD4008	<b>Audit of ready-to-eat meat products manufacturing*</b>	
FBPFSY4002	<b>Supervise and verify supporting programs for food safety</b>	

Unit code	Unit title	Summary of content of unit
<b>FOOD MANUFACTURE AND PROCESSING</b>		
FBPFST4020	Implement and review the processing of market milk and related products	Food sector specific units
FBPFST4033	Implement and review the production of chocolate products	
FBPFST4035	Implement and review the processing of high and low boil confectionery	
FBPFST4036	Implement and review the processing of confectionery products	
FDFST5024#	Review standards and procedures for manufacture of fermented dairy products and dairy desserts	
FBPCHE4001#	Carry out sampling and interpret tests for cheese production	
FBPCHE4002#	Produce acid-coagulated soft cheese	
FBPCHE4003#	Produce a range of rennet-coagulated cheeses	
FBPCHE4004#	Produce acid/heat-coagulated cooked cheese	
FBPFST4050	Identify and implement product safety and quality for processing of fruit, vegetables and other produce	
FBPFST4052	Implement and review the manufacturing and processing of edible fats and oils	
FBPFST4054	Identify and implement product safety and quality for manufacturing of cereal products	

*This information prepared by Skills Impact is a general summary of content from draft documents that are currently being reviewed as part of a project to review qualifications in the Food, Beverage and Pharmaceutical Training Package.*

*Please visit the [Skills Impact website](#) to view and provide feedback on the complete draft units of competency and qualifications referred to here.*