

22704VIC Certificate III in Musical Instrument Making and Maintenance

22703VIC Certificate IV in Musical Instrument Making and Repair

Version 1 - 3 October 2025

**This course has been accredited under Part 4.4 of the
Education and Training Act 2006.**

Accredited for the period:

1 January 2026 to 31 December 2030

Version history

Version number	Details	Date approved
1.0	Reaccreditation	3 October 2025

Table of contents

Section A – Copyright and course classification information	1
1. Copyright owner of the course	1
2. Address	1
3. Type of submission	1
4. Copyright acknowledgement.....	2
5. Licensing and franchise.....	3
6. Course accrediting body.....	4
7. AVETMISS information	4
8. Period of accreditation.....	4
Section B – Course information.....	5
1. Nomenclature.....	5
1.1 Name of the qualification.....	5
1.2 Nominal duration of the course.....	5
2. Vocational or educational outcomes.....	5
2.1 Outcome(s) of the course.....	5
2.2 Course description.....	6
3. Development of the course.....	7
3.1 Industry, education, legislative, enterprise or community needs	7
3.2 Review for re-accreditation.....	10
4. Course outcomes	21
4.1 Qualification level.....	21
4.2 Foundation skills	24
4.3 Recognition given to the course (if applicable)	24
4.4 Licensing/regulatory requirements (if applicable)	24
5. Course rules.....	24
5.1 Course structure	24
5.2 Entry requirements.....	31
6. Assessment	31
6.1 Assessment strategy.....	31
6.2 Assessor competencies.....	33
7. Delivery	33
7.1 Delivery modes.....	33
7.2 Resources	33
8. Pathways and articulation	34
9. Ongoing monitoring and evaluation.....	35
9.1 Monitoring and evaluation.....	35
Section C – Units of competency	36

Section A – Copyright and course classification information

Copyright owner of the course	Copyright of this material is reserved to the Crown in the right of the State of Victoria on behalf of the Department of Jobs, Skills, Industry and Regions (DJSIR) Victoria. © State of Victoria (DJSIR) 2025		
Address	Executive Director Deputy CEO Victorian Skills Authority Department of Jobs Skills, Industry and Regions (DJSIR) GPO Box 4509 Melbourne Vic 3001 Organisational Contact: Manager, Training and Learning Products Unit Engagement Branch Victorian Skills Authority Telephone: 131 823 Email: course.enquiry@djsir.vic.gov.au Day-to-day contact: Curriculum Maintenance Manager, Building Industries Holmesglen Institute PO Box 42 HOLMESGLEN VIC 3148 Telephone: (03) 9564 1987 Email: teresa.signorello@holmesglen.edu.au		
Type of submission	☐	Accreditation	
	☒	Reaccreditation	22563VIC Certificate III in Musical Instrument Making and Maintenance 22564VIC Certificate IV in Musical Instrument Making and Repair

Copyright acknowledgement

The following units of competency:

- BSBCMM511 Communicate with influence
- BSBESB401 Research and develop business plans
- BSBESB403 Plan finances for new business ventures
- BSBOPS403 Apply business risk management processes
- BSBSTR402 Implement continuous improvement

have been imported from the BSB Business Services Training Package administered by the Commonwealth of Australia.

The following units of competency:

- CUAACD101 Use basic drawing techniques
- CUAACD313 Produce technical drawings
- CUACAL311 Produce calligraphy
- CUAPPR415 Develop and discuss ideas for own creative work

have been imported from the CUA Creative Arts and Culture Training Package administered by the Commonwealth of Australia.

The following units of competency:

- MSFFDM4006 Hand carve wood to custom design
- MSFFDM4012 Produce computer-aided line and component production drawings
- MSFFDM4015 Produce patterns and templates
- MSFFDM4017 Purchase materials and consumables
- MSFFDM5007 Develop, trial and evaluate prototypes
- MSFFDM5009 Generate and transfer complex computer-aided drawings and specifications
- MSFFF2015 Apply stains, fillers and bleach
- MSFFF2016 Apply surface coatings by hand
- MSFFF3012 Apply plural component coatings
- MSFFF3013 Apply soft rubber techniques
- MSFFF3014 Enhance finishes
- MSFFF3015 Repair and touch up surfaces
- MSFFM2013 Use furniture making hand and power tools

- MSFFM2018 Operate basic static machines safely
- MSFFM3024 Construct jigs and fixtures
- MSFFM3030 Produce manual and computer-aided production drawings
- MSFGN2002 Move and store materials and products
- MSFGN3005 Read and interpret work documents
- MSFGN3006 Estimate and cost job

have been imported from the MSF Furnishing Training Package administered by the Commonwealth of Australia.

The following units of competency:

- MSMENV272 Participate in environmentally sustainable work practices
- MSMENV472 Implement and monitor environmentally sustainable work practices
- MSMOPS101 Make measurements
- MSMSUP102 Communicate in the workplace
- MSMSUP106 Work in a team
- MSMSUP383 Facilitate a team
- MSMWHS200 Work safely
- MSMWHS300 Facilitate the implementation of WHS for a work group

have been imported from the MSM Manufacturing Training Package administered by the Commonwealth of Australia.

The following unit of competency:

- TLID0021 Store and handle dangerous goods and hazardous substances

have been imported from the TLI Transport and Logistics Training Package administered by the Commonwealth of Australia.

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Manager – Training and Learning Products Unit

Victorian Skills Authority

Department of Jobs, Skills, Industry and Regions (DJSIR)

GPO Box 4509

Melbourne Vic 3001

Email: course.enquiry@djsir.vic.gov.au

Copies of this publication can be downloaded free of charge from the [Victorian Government website](#).

Course accrediting body	Victorian Registration and Qualifications Authority	
AVETMISS information	OSCA code	391933 Musical instrument maker or repairer
	ASCED code	0301 Manufacturing Engineering and Technology
	National course code	22704VIC 22703VIC
Period of accreditation	1 January 2026 to 31 December 2030	

Section B – Course information

1. Nomenclature	Standard 4.1 and 5.8 AQTF 2021 Standards for Accredited Courses
1.1 Name of the qualification	Certificate III in Musical Instrument Making and Maintenance Certificate IV in Musical Instrument Making and Repair
1.2 Nominal duration of the course	Certificate III in Musical Instrument Making and Maintenance 497- 728 hours Certificate IV in Musical Instrument Making and Repair 772-1464 hours
2. Vocational or educational outcomes	Standard 5.1 AQTF 2021 Standards for Accredited Courses
2.1 Outcome(s) of the course	Certificate III in Musical Instrument Making and Maintenance The Certificate III in Musical Instrument Making and Maintenance reflects the role of individuals who make and maintain a wide range of musical instruments. This role is usually performed under supervision and is conducted in a music instrument manufacturing or retail work environment. This course is intended to provide participants with a range of knowledge and skills to perform the following functions including: • applying safe and environmentally sustainable work practices • communicating and working effectively in a team • using safe material handling, storage and disposal practices • apply safe tool and equipment handling and techniques • reading and interpreting work documents, diagrams and operating procedures • making measurements and calculations for instrument making and material quantities • assembling components to produce a musical instrument according to a design brief • applying a range of finishes to musical instruments • maintaining and servicing musical instruments

	- conducting quality checks and tests for each stage of musical instrument making and service. Certificate IV in Musical Instrument Making and Repair The Certificate IV in Musical Instrument Making and Repair reflects the role of individuals who manufacture and repair a wide range of musical instruments. Individuals in this role develop manufacturing processes and undertake repair functions with a focus on structural integrity, aesthetics and sound quality. In this role they may have team leader or supervisory roles or operate as a small business owner. This course is intended to provide participants with a range of knowledge and skills to perform the following functions including: - implementing and monitoring safety and environmentally sustainable work practices - communicating effectively with team members and customers - manufacturing processes for volume outputs - producing technical and computer aided drawings for the purposes of manufacturing production - estimating and costing jobs - managing the manufacturing for musical instruments to ensure consistency and volume of outputs - repairing structural alteration to musical instruments according to customer requirements - finishing surfaces of musical instruments according to design brief - managing quality control processes for each stage of musical instrument manufacturing production.
2.2 Course description	Certificate III in Musical Instrument Making and Maintenance This course prepares graduates with the skills and knowledge for entry level employment within the musical instrument manufacturing and retail service/maintenance sectors. It also provides a pathway for further learning into the Certificate IV in Musical Instrument Making and Repair. Certificate IV in Musical Instrument Making and Repair This course prepares graduates with skills and knowledge for employment in leadership and specialised technical repair roles within the musical instrument manufacturing and performing arts sectors. It also supports small business start-ups as sole traders offering bespoke musical instrument making and repair services.

3. Development of the course	Standards 4.1, 5.1, 5.2, 5.3 and 5.4 AQTF 2021 Standards for Accredited Courses
3.1 Industry, education, legislative, enterprise or community needs	Data from Jobs and Skills Australia reports the occupation of Musical Instrument Makers and Repairers is an aging workforce¹. The Australian Music Association (AMA), peak industry body, reports growth in the instrument manufacturing and repair market based on ten-year import and export sale trends from 2014². The Victorian Skills Authority Employment Forecast Data 2023-2026 lists the occupation as 3995 Performing Arts technicians, confirming the workforce shortage with employment growth of 77 workers, retirements 372, new workers required 449. The AMA 2024 Industry Survey reports ‘technical/repair’ skills as the most common area of skills shortage within the music industry, experienced by 61% of retailers and 47% of wholesalers surveyed; they assert shortage exists across all specialisations. Furthermore, sales data for this niche industry suggests strong market growth. Sales in guitar imports shows a 10 year upward trend from 2014, peaking in 2022 at just over \$120M, indicating growth in the size of the repair market. Export market sales for stringed instruments have grown steadily since 2020, increasing by approximately 200% to peak at \$15M in 2023; highlighting the need for a skilled manufacturing labour force³. The State Government supports building advanced manufacturing capabilities across the economy, as one of five (priority sectors), encouraging Victorian manufacturers to invest in advanced technologies, skills and business models to boost manufacturing capability and job creation. While a niche industry, guitar manufacture in Victoria has an 80-year history of applied innovation and production efficiency, with successful grant funding for manufacture efficiency to support market expansion approved in the past. Their operations align with advanced manufacturing principles. Substantial government funding has been received to resource this industry’s specialist training facility at Northern College of the Arts and Technology: (State \$1.1M capital grant) and (Federal \$250,000 specialist equipment) evidencing course support. Northern College of the Arts and Technology also received funding from

¹ [Musical Instrument Makers and Repairers | Jobs and Skills Australia](#)

² AMA Market Report 2023.

³ AMA Letter of Support, Alex Masso, Oct 2024: AMA State of the Industry Report, 2024 www.australianmusic.asn.au/state-of-the-industry

the Department of Education and Training in 2023 to train industry personnel in Training and Education (TAE) to perpetuate skill transfer. Graduates now undertake the TAE to resource course demand. This framework supports market expansion and employment to industry.

The Certificate III in Musical Instrument Making and Maintenance and the Certificate IV in Musical Instrument Making and Repair were initially established in 2008 and are the only nationally recognised training products currently available that develop technical musical instrument making, manufacture, repair and maintenance/servicing skills. They service a Victorian centric industry with outcomes not represented within any national training package.

The Certificate III VET Delivered to Secondary Schools (VDSS) program services a youth cohort within the lower socio-economic Northern Melbourne VET Cluster. Course loss would create student disadvantage, regarding limiting access to supervised entry level employment within manufacturing, and potential learning pathway opportunities within the music manufacturing industry, music allied sectors and lateral industries where skill transfer readily occurs (design, 3D modelling).

The Certificate IV course has been designed specifically to lead to occupations in the music instrument making, repair and manufacture industry. It provides a vital skill set that underpins the performance industry and societal enjoyment of music, founded on sound quality.

Impact of course expiry would remove the skilled labour force from the instrument manufacturing industry, impacting their overall production, domestic supply and export capability. Technical skill required by music retail, performance arts and sole trade start-ups would suffer quality and service availability issues. All sectors would be adversely affected.

The Certificate III VDSS program experienced an increase in total student enrolments year on year from 2022. Total enrolments for 2024 numbered 27; total enrolments for 2025 (to date) numbered 32. Certificate IV course enrolments have averaged fourteen (14) per year since 2021 and were historically capped at eighteen (18), to align with industry need. Nineteen Victorian music businesses have employed graduates in the last two years⁴. Given forecast industry growth and recent increases in Certificate III pathway participants, enrolment into the Certificate IV course is

⁴ Maton Guitars, Cole Clark Guitars, Australian Music Supplies, Echo Tone Guitars, Clingan Guitar Tone, Coleman's Music Melbourne, Yamaha, Cranbourne Music, Found Music, Gourley Music, D' Addario, RACV Club, Shane Briggs (self-employed), Music Swop Shop, Volaris Music Centre, Manny's Music, Bass Centre, The Acoustic Centre, CMI Music and Audio

expected to expand over the medium term, to meet industry demand for musical instrument makers and repairers.

The Certificate IV is on the Victorian Government Skills First Training Needs List (TNL) for 2024 and 2025. Trending market expansion and a maturing workforce underpin forecast skill shortages for this industry.

The following table identifies a comparison of enrolments for the courses for Government funded and Fee for Service programs.

22563VIC Certificate III in Musical Instrument Making and Maintenance

Year	Government subsidy	Fee for service	Total
2021	0	5	5
2022	0	11	11
2023	0	19	19
2024	0	24	24

22564VIC Certificate IV in Musical Instrument Making and Repair

Year	Government subsidy	Fee for service	Total
2021	13	3	16
2022	8	3	11
2023	13	0	13
2024	14	0	14

The project for the redevelopment of the music instrument making courses was overseen by a project steering committee comprised of the following industry and RTO representatives:

Patrick Evans (Chair)	Manager, Maton Guitars
Alex Masso	Executive Officer, Australian Music Association
Bon Nardella	Manager Production and Projects, Northern College of the Arts and Technology

- replacing two core units relating to safety and measuring skills in the Certificate IV course with higher complexity units to better align against its AQF level
- minor amendment to the number of units to be selected in the Group A elective units for both courses to allow for great flexibility
- the review of elective units (imported and enterprise) for both courses to remove unnecessary or surplus units that have not been used or where skills and knowledge are already addressed by other units
- the updating of imported units when they have been revised or deleted
- the transition of all enterprise units to align against the updated Standards for Accredited Courses unit template, including the strengthening of performance evidence
- minor changes to terminology, namely 'special stringed instruments' to 'traditional stringed instruments' to better reflect the instrument classification.

The 22704VIC Certificate III in Musical Instrument Making and Maintenance supersedes and is equivalent to 22563VIC Certificate III in Musical Instrument Making and Maintenance.

The 22703VIC Certificate IV in Musical Instrument Making and Repair supersedes and is equivalent to 22564VIC Certificate IV in Musical Instrument Making and Repair.

The following tables shows the unit mapping against proposed and current courses to indicate equivalence and non-equivalence.

Transition Arrangements

Unit of competency mapping of existing course structure against the new course structure.

Relationship:

- *Equivalent (E) – outcomes of unit of competency are equivalent*
- *Not equivalent (NE) – outcomes of unit of competency are not equivalent*
- *New (N) – new unit/newly imported unit of competency*
- *Removed (R) – unit of competency removed/deleted and not replaced.*

22563VIC Certificate III in Musical Instrument Making and Maintenance	22704VIC Certificate III in Musical Instrument Making and Maintenance	Relationship E/NE/N/R
CUAACD101 Use basic drawing techniques	CUAACD101 Use basic drawing techniques	E
MSFFF2007 Apply stains, fillers and bleach	MSFFF2015 Apply stains, fillers and bleach	E
MSFFF2008 Apply surface coatings by hand	MSFFF2016 Apply surface coatings by hand	E
MSFFF3003 Apply plural component coatings	MSFFF3012 Apply plural component coatings	E
MSFFF3004 Apply soft rubber techniques	MSFFF3013 Apply soft rubber techniques	E
MSFFF3005 Enhance finishes	MSFFF3014 Enhance finishes	E
MSFFM2001 Use furniture making sector hand and power tools	MSFFM2013 Use furniture making hand and power tools	E
MSFFM2010 Set up and operate basic static machines	MSFFM2018 Operate basic static machines safely	NE
MSFFM3009 Produce manual and computer-aided production drawings		R
MSFGN2002 Move and store materials and products	MSFGN2002 Move and store materials and products	E
MSFGN3001 Read and interpret work documents	MSFGN3005 Read and interpret work documents	E

MSMENV272 Participate in environmentally sustainable work practices	MSMENV272 Participate in environmentally sustainable work practices	E
MSMOPS101 Make measurements	MSMOPS101 Make measurements	E
MSMSUP102 Communicate in the workplace	MSMSUP102 Communicate in the workplace	E
MSMSUP106 Work in a team	MSMSUP106 Work in a team	E
MSMWHS200 Work safely	MSMWHS200 Work safely	E
TLID2003 Handle dangerous goods/hazardous substances	TLID0021 Store and handle dangerous goods and hazardous substances	E
VU22991 Assemble instrument components	VU23989 Assemble instrument components	E
VU22992 Make acoustic guitars	VU23990 Make acoustic guitars	E
VU22993 Make electric guitars	VU23991 Make electric guitars	E
VU22994 Make percussion instruments	VU23992 Make percussion instruments	E
VU22995 Make brass instruments	VU23993 Make brass instruments	E
VU22996 Make woodwind and aerophone instruments	VU23994 Make woodwind and aerophone instruments	E
VU22997 Make stringed instruments	VU23995 Make stringed instruments	E

VU22998 Make special stringed instruments	VU23996 Make traditional stringed instruments	E
VU22999 Maintain and service acoustic guitars	VU23997 Maintain and service acoustic guitars	E
VU23000 Maintain and service electric guitars	VU23998 Maintain and service electric guitars	E
VU23001 Maintain and service percussion instruments	VU23999 Maintain and service percussion instruments	E
VU23002 Maintain and service brass instruments	VU24000 Maintain and service brass instruments	E
VU23005 Maintain and service woodwind instruments	VU24001 Maintain and service woodwind instruments	E
VU23003 Maintain and service stringed instruments	VU24002 Maintain and service stringed instruments	E
VU23004 Maintain and service special stringed instruments	VU24003 Maintain and service traditional stringed instruments	E
VU23006 Construct and apply decorative treatments and finishes to musical instruments	VU24004 Construct and apply decorative treatments and finishes to musical instruments	E
VU23007 Apply colour theory in response to a brief		R
22564VIC Certificate IV in Musical Instrument Making and Repair	22703VIC Certificate IV in Musical Instrument Making and Repair	Relationship E/NE/N/R

BSBCMM402 Implement effective communication strategies	BSBCMM511 Communicate with influence	NE
BSBMGT403 Implement continuous improvement	BSBSTR402 Implement continuous improvement	E
BSBRISK401 Identify risk and apply risk management processes	BSBOPS403 Apply business risk management processes	E
BSBSMB402 Plan small business finances	BSBESB403 Plan finances for new business ventures	E
BSBSMB404 Undertake small business planning	BSBESB401 Research and develop business plans	E
CUAACD303 Produce technical drawings	CUAACD313 Produce technical drawings	E
CUACAL301 Produce calligraphy	CUACAL311 Produce calligraphy	E
CUAPHI302 Capture photographic images		R
CUAPPR405 Develop and discuss ideas for own creative work	CUAPPR415 Develop and discuss ideas for own creative work	E
MSFDN4002 Produce line and component production drawings	MSFFDM4012 Produce computer-aided line and component production drawings	E
MSFDN4003 Produce patterns and templates	MSFFDM4015 Produce patterns and templates	E

MSFDN5001 Generate and transfer complex computer-aided drawings and specifications	MSFFDM5009 Generate and transfer complex computer-aided drawings and specifications	E
MSFFF2007 Apply stains, fillers and bleach	MSFFF2015 Apply stains, fillers and bleach	E
MSFFF2008 Apply surface coatings by hand	MSFFF2016 Apply surface coatings by hand	E
MSFFF3003 Apply plural component coatings	MSFFF3012 Apply plural component coatings	E
MSFFF3004 Apply soft rubber techniques	MSFFF3013 Apply soft rubber techniques	E
MSFFF3005 Enhance finishes	MSFFF3014 Enhance finishes	E
MSFFF3006 Repair and touch up surfaces	MSFFF3015 Repair and touch up surfaces	E
MSFFM3009 Produce manual and computer-aided production drawings	MSFFM3030 Produce manual and computer-aided production drawings	E
MSFFM3024 Construct jigs and fixtures	MSFFM3024 Construct jigs and fixtures	E
MSFFM4001 Hand carve wood to custom design	MSFFDM4006 Hand carve wood to custom design	E
MSFFM4003 Produce curved and shaped components for custom furniture		R

MSFFM4004 Produce timber veneered components for custom furniture		R
MSFFT4011 Purchase materials and consumables	MSFFDM4017 Purchase materials and consumables	E
MSFFT5008 Develop, trial and evaluate prototypes	MSFFDM5007 Develop, trial and evaluate prototypes	NE
MSFFT5010 Develop products and related processes		R
MSFGN2001 Make measurements and calculations		R
MSFGN3002 Estimate and cost job	MSFGN3006 Estimate and cost job	E
MSFPF4004 Determine and apply gilding techniques		R
MSFPT3001 Apply piano industry knowledge and work techniques		R
MSFPT3002 Select materials for piano repair and manufacture		R
MSFPT3003 Repair upright and grand piano actions, keys and pedals		R
MSFPT3005 Re-string and re-pin a piano		R

MSFPT3006 Regulate actions, keys and pedals of upright pianos		R
MSFPT3007 Regulate actions, keys and pedals of grand pianos		R
MSFPT3008 Apply piano tuning theory and basic acoustics		R
MSFPT3009 Develop control of tuning hammers		R
MSFPT3010 Pitch raise a piano		R
MSFPT3011 Tune unisons aurally to a beatless condition		R
MSFPT3012 Tune octaves aurally to appropriate stretch		R
MSFPT3013 Tune a temperament octave to produce an equally tempered scale		R
MSFPT3014 Tune a piano aurally and electronically within time and accuracy constraints		R
MSFPT3015 Voice a piano		R
MSFPT3016 Provide advice to customers on piano tuning and repair		R

MSAENV472B Implement and monitor environmentally sustainable work practices	MSMENV472 Implement and monitor environmentally sustainable work practices	E
MSMSUP383 Facilitate a team	MSMSUP383 Facilitate a team	E
MSMWHS200 Work safely		R
	MSMWHS300 Facilitate the implementation of WHS for a work group	N
TLID2003 Handle dangerous goods /hazardous substances	TLID0021 Store and handle dangerous goods and hazardous substances	E
VU22509 Apply computer aided manufacturing (CAM) processes		R
VU22992 Make acoustic guitars		R
VU22993 Make electric guitars		R
VU22994 Make percussion instruments		R
VU22995 Make brass instruments		R
VU22996 Make woodwind and aerophone instruments		R
VU22997 Make stringed instruments		R

VU22998 Make special stringed instruments		R
VU23008 Develop and update music products industry knowledge	VU24005 Develop and update music products industry knowledge	E
VU23009 Manufacture acoustic guitars	VU24006 Manufacture acoustic guitars	E
VU23010 Manufacture electric guitars	VU24007 Manufacture electric guitars	E
VU23011 Manufacture special stringed instruments	VU24012 Manufacture traditional stringed instruments	E
VU23012 Manufacture stringed instruments	VU24011 Manufacture stringed instruments	E
VU23013 Manufacture percussion instruments	VU24008 Manufacture percussion instruments	E
VU23014 Manufacture brass instruments	VU24009 Manufacture brass instruments	E
VU23015 Manufacture woodwind instruments	VU24010 Manufacture woodwind instruments	E
VU23016 Repair acoustic guitars	VU24013 Repair acoustic guitars	E
VU23017 Repair electric guitars	VU24014 Repair electric guitars	E
VU23018 Repair special stringed instruments	VU24020 Repair traditional stringed instruments	E

VU23019 Repair stringed instruments	VU24019 Repair stringed instruments	E
VU23020 Repair percussion instruments	VU24015 Repair percussion instruments	E
VU23021 Repair brass instruments	VU24016 Repair brass instruments	E
VU23022 Repair woodwind instruments	VU24017 Repair woodwind instruments	E
VU23023 Repair aerophone instruments	VU24018 Repair aerophone instruments	E
VU23024 Work effectively in a customer service environment		R
VU23025 Carry out soft soldering techniques		R

4. Course outcomes	Standards 5.5, 5.6 and 5.7 AQTF 2021 Standards for Accredited Courses
4.1 Qualification level	Certificate III in Musical Instrument Making and Maintenance The Certificate III in Musical Instrument Making and Maintenance complies with the level 3 specifications of the Australian Qualifications Framework Second Edition January 2013 as follows: Skills Graduates at this level will have a range of cognitive, technical and communication skills to select and apply a specialised range of methods, tools, materials and information to complete routine activities, such as: • safe power tool usage • reading work orders and diagrams • making basic mathematical calculations and measurements

- assembly for instrument making
- instrument maintenance and service
- finishing applications.

Knowledge

Graduates of the Certificate III in Musical Instrument Making and Maintenance will have factual, technical, procedural and theoretical knowledge in the areas of:

- legislative and workplace safety requirements and practices
- environmentally sustainable work practices
- wood types and metal properties
- safe instrument storage practices
- assembly processes
- finishing methodology.

Graduates will also provide and transmit solutions to predictable and sometimes unpredictable problems, such as instrument tuning to standards, sequencing of work processes, raw material assessment and workplace safety application.

Application of skills and knowledge

Graduates at this level will apply skills and knowledge to demonstrate autonomy and judgement and take limited responsibility in known and stable contexts within established parameters through:

- reading and interpreting work order and maintenance requests
- completing assembly tasks within defined time frames
- identifying faults in raw materials and tools prior to, and during work tasks
- communicating safety issues to appropriate personnel in a timely manner
- cleaning, checking and storing tools and equipment correctly.

Volume of learning

The volume of learning for this qualification is typically 1 - 2 years and incorporates structured and unstructured learning activities to develop musical instrument making and maintenance knowledge and skill. Structured activities may include reading text material, completing projects and assignments. Unstructured activities may include researching the making of specific instrument types, discussions with a

mentor, preparing for assessments and investigating pathway options for further learning appropriate to desired learning goals.

Certificate IV in Musical Instrument Making and Repair

The Certificate IV in Musical Instrument Making and Repair complies with the level 4 specifications of the Australian Qualifications Framework Second Edition January 2013 as follows:

Skills

Graduates at this level will have a broad range of cognitive, technical and communication skills to select and apply a range of methods, tools, materials and information to complete routine and non-routine activities, such as:

- safe power tool and machine usage
- instrument manufacturing processes
- manual and computer-aided drawing
- instrument repair and problem solving
- finishing applications.

Knowledge

Graduates of the Certificate IV in Musical Instrument Making and Repair will have broad factual, technical and some theoretical knowledge of a specific area or a broad field of work and learning in the areas of:

- legislative and workplace safety requirements and practices
- environmentally sustainable work practices
- a range of instrument types, associated structures and characteristics
- drawing and manufacturing techniques
- repair methodologies
- properties of raw materials and their sources
- finishing methodology.

Graduates will also provide and transmit solutions to a variety of predictable and sometimes unpredictable problems, such as instrument repair requests, machine break downs, suitability of raw material, legislative safety application and scheduling of competing job tasks.

Application of skills and knowledge

	Graduates at this level will be able to apply skills and knowledge to demonstrate autonomy and judgement and limited responsibility in known or changing contexts and within established parameters through: • using hand and power tools and operating equipment safely to make musical instruments with minimal material wastage • monitoring quality of machined tasks and initiating procedures for machine recalibration based on variances identified • questioning customers to determine the nature and scope of instrument repairs • calculating time frames for instrument repairs with cognisance to resource availability and prioritised job schedules. Volume of learning The volume of learning for this qualification is typically 0.5 - 2 years and incorporates structured and unstructured learning activities to develop musical instrument making and repair knowledge and skill. Structured activities may include researching reading material related to the properties of specific instruments, problem solving repair projects and instrument making assignments. Unstructured activities may include using online mediums to communicate with other participants, music-based discussions with workplace colleagues and mentors, preparing for assessments and evaluating pathway options for further learning and developing flexible learning goals.
4.2 Foundation skills	Foundation Skills Qualification summaries included as appendices.
4.3 Recognition given to the course (if applicable)	N/A
4.4 Licensing/regulatory requirements (if applicable)	N/A
5. Course rules	Standards 5.8 and 5.9 AQTF 2021 Standards for Accredited Courses
5.1 Course structure	Certificate III in Musical Instrument Making and Maintenance

To be awarded the qualification, 22704VIC Certificate III in Musical Instrument Making and Maintenance, participants are required to successfully complete 19 units of competency.

- 9 core units
- 10 elective units comprising:
 - at least 1 unit from Group A - Make Instruments
 - at least 2 units from Group B - Maintain and Service Instruments
 - the remaining 7 units not previously selected from Groups A, B or C.

Where the full course is not completed a Statement of Attainment will be issued for any completed unit.

Certificate IV in Musical Instrument Making and Repair

To be awarded the qualification, 22703VIC Certificate IV in Musical Instrument Making and Repair, participants are required to successfully complete 20 units of competency.

- 7 core units
- 13 elective units comprising:
 - at least 1 unit from Group A - Manufacture Instruments
 - at least 2 units from Group B - Repair Instruments
 - the remaining 10 units not previously selected from Groups A, B or C.

Where the full course is not completed a Statement of Attainment will be issued for any completed unit.

Certificate III in Musical Instrument Making and Maintenance

Unit of competency code	Unit of competency title	Field of Education code (6-digit)	Pre-requisite	Nominal hours
Core units				
MSFFM2013	Use furniture making hand and power tools	030717	Nil	40

MSFGN3005	Read and interpret work documents	120505	Nil	24
MSMENV272	Participate in environmentally sustainable work practices	059999	Nil	30
MSMOPS101	Make measurements	010101	Nil	30
MSMSUP102	Communicate in the workplace	120505	Nil	20
MSMSUP106	Work in a team	120505	Nil	30
MSMWHS200	Work safely	061301	Nil	30
TLID0021	Store and handle dangerous goods and hazardous substances	089901	Nil	40
VU23989	Assemble instrument components	030199	Nil	24
Group A elective units – Make instruments				
VU23990	Make acoustic guitars	030199	Nil	30
VU23991	Make electric guitars	030199	Nil	30
VU23992	Make percussion instruments	030199	Nil	30
VU23993	Make brass instruments	030199	Nil	20
VU23994	Make woodwind and aerophone instruments	030199	Nil	30
VU23995	Make stringed instruments	030199	Nil	40
VU23996	Make traditional stringed instruments	030199	Nil	24
Group B elective units – Maintain and service instruments				

VU23997	Maintain and service acoustic guitars	030199	Nil	40
VU23998	Maintain and service electric guitars	030199	Nil	40
VU23999	Maintain and service percussion instruments	030199	Nil	20
VU24000	Maintain and service brass instruments	030199	Nil	25
VU24001	Maintain and service woodwind instruments	030199	Nil	20
VU24002	Maintain and service stringed instruments	030199	Nil	50
VU24003	Maintain and service traditional stringed instruments	030199	Nil	40
Group C elective units – General				
CUAACD101	Use basic drawing techniques	100301	Nil	50
MSFFF2015	Apply stains, fillers and bleach	030117	Nil	52
MSFFF2016	Apply surface coatings by hand	030117	Nil	40
MSFFF3012	Apply plural component coatings	030117	Nil	52
MSFFF3013	Apply soft rubber techniques	030117	Nil	20
MSFFF3014	Enhance finishes	030117	Nil	24
MSFFM2018	Operate basic static machines safely	030117	Nil	56
MSFGN2002	Move and store materials and products	089901	Nil	16

VU24004	Construct and apply decorative treatments and finishes to musical instruments	030199	Nil	30
Total nominal hours				497- 728

Certificate IV in Musical Instrument Making and Repair

Unit of competency code	Unit of competency title	Field of Education code (6-digit)	Pre-requisite	Nominal hours
Core units				
BSBCMM511	Communicate with influence	100707	Nil	60
MSFGN3006	Estimate and cost job	040307	Nil	16
MSMENV472	Implement and monitor environmentally sustainable work practices	059999	Nil	40
MSMSUP383	Facilitate a team	120505	Nil	30
MSMWHS300	Facilitate the implementation of WHS for a work group	061301	Nil	40
TLID0021	Store and handle dangerous goods and hazardous substances	089901	Nil	40
VU24005	Develop and update music products industry knowledge	030199	Nil	10
Group A elective units – Manufacture instruments				
VU24006	Manufacture acoustic guitars	030199	Nil	80

VU24007	Manufacture electric guitars	030199	Nil	80
VU24008	Manufacture percussion instruments	030199	Nil	80
VU24009	Manufacture brass instruments	030199	Nil	80
VU24010	Manufacture woodwind instruments	030199	Nil	80
VU24011	Manufacture stringed instruments	030199	Nil	80
VU24012	Manufacture traditional stringed instruments	030199	Nil	80
Group B elective units – Repair instruments				
VU24013	Repair acoustic guitars	030199	Nil	80
VU24014	Repair electric guitars	030199	Nil	80
VU24015	Repair percussion instruments	030199	Nil	40
VU24016	Repair brass instruments	030199	Nil	180
VU24017	Repair woodwind instruments	030199	Nil	120
VU24018	Repair aerophone instruments	030199	Nil	40
VU24019	Repair stringed instruments	030199	Nil	100
VU24020	Repair traditional stringed instruments	030199	Nil	80
Group C elective units – General				
BSBESB401	Research and develop business plans	080301	Nil	50

BSBESB403	Plan finances for new business ventures	080301	Nil	50
BSBOPS403	Apply business risk management processes	080301	Nil	50
BSBSTR402	Implement continuous improvement	030101	Nil	40
CUAACD313	Produce technical drawings	100501	Nil	50
CUACAL311	Produce calligraphy	100301	Nil	50
CUAPPR415	Develop and discuss ideas for own creative work	100399	Nil	70
MSFFDM4012	Produce computer-aided line and component production drawings	100599	Nil	64
MSFFDM4015	Produce patterns and templates	100599	Nil	36
MSFFDM5009	Generate and transfer complex computer-aided drawings and specifications	100599	Nil	72
MSFFF2015	Apply stains, fillers and bleach	030117	Nil	52
MSFFF2016	Apply surface coatings by hand	030117	Nil	40
MSFFF3012	Apply plural component coatings	030117	Nil	52
MSFFF3013	Apply soft rubber techniques	030117	Nil	20
MSFFF3014	Enhance finishes	030117	Nil	24
MSFFF3015	Repair and touch up surfaces	030117	Nil	40
MSFFM3030	Produce manual and computer-aided production drawings	030101	Nil	60



MSFFM3024	Construct jigs and fixtures	030705	Nil	40
MSFFDM4006	Hand carve wood to custom design	030111	Nil	60
MSFFDM4017	Purchase materials and consumables	089901	Nil	36
MSFFDM5007	Develop, trial and evaluate prototypes	030113	Nil	108
Total nominal hours				772-1464 hours

5. Course rules	Standard 5.11 AQTF 2021 Standards for Accredited Courses
5.2 Entry requirements	There are no entry requirements for the Certificate III in Musical Instrument Making and Maintenance and Certificate IV in Musical Instrument Making and Repair. Applicants enrolling in the Certificate III in Musical Instrument Making and Maintenance are best equipped to successfully undertake the course if they have as a minimum, language, literacy and numeracy skills that align to Level 2 of the Australian Core Skills Framework (ACSF). Applicants enrolling in the Certificate IV in Musical Instrument Making and Repair are best equipped to successfully undertake the course if they have as a minimum, language, literacy and numeracy skills that align to Level 3 of the ACSF. The ACSF can be accessed from the education department's website from here. Applicants with language, literacy and numeracy skills at lower levels than those suggested will require additional support to successfully undertake the qualifications.

6. Assessment	Standard 5.12 and 5.14 AQTF 2021 Standards for Accredited Courses
6.1 Assessment strategy	All assessment, including Recognition of Prior Learning (RPL), must be compliant with the requirements of: Standard 1 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guidelines 4.1 and 4.2 of the VRQA Guidelines for VET Providers,



	or - the 2025 Standards for Registered Training Organisations (RTOs), or - the relevant standards and Guidelines for RTOs at the time of assessment. The Assessment Requirements for each unit of competency specifies the performance and knowledge evidence and the conditions for assessment that includes the physical conditions and resources required to demonstrate competency. Where assessment of a unit of competency is not practical in a workplace, a simulated musical instrument making and repair environment may also be used. The simulated environment must simulate realistic working conditions with all the relevant equipment and conditions of that working environment, including interactions with relevant people. Essentially, learners must perform the required skills as a component of multiple tasks, within a team and with the interruptions and unexpected anomalies that are typical of the musical instrument making/manufacturing and repair environment. Where not mandated in the units of competency, a range of assessment methods may be used to determine competency. The following are suggested methods that are appropriate for the units of competency in these courses: - written and/or oral questions/referenced assignments to assess required knowledge and understanding - observation of tasks and interactions with supervisor/relevant people in musical instrument making workplace or simulated environment - portfolio of evidence such as photographs of completed work - industry aligned projects/presentations - third party reports that confirm that work tasks have been completed to an acceptable level based on the organisation's expectations and that the evidence is based on real work performance. Assessment strategies for the imported units from training packages should be consistent with the Assessment Requirements for the relevant training packages.
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6.2 Assessor competencies	Assessment must be undertaken by a person or persons in accordance with: • Standard 1.4 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guidelines 3 of the VRQA Guidelines for VET Providers, or • the 2025 Standards for Registered Training Organisations (RTOs), or • the relevant standards and Guidelines for RTOs at the time of assessment. Units of competency imported from training packages must reflect the requirements for assessors specified in that training package.
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7. Delivery	Standards 5.12, 5.13 and 5.14 AQTF 2021 Standards for Accredited Courses
7.1 Delivery modes	There are no restrictions on the delivery for the courses. The courses may be delivered either on a full time or part time basis via a combination of blended learning, internal, external and workplace-based or simulated environment that closely replicates conditions in the industry working environment. The course aims to develop practical competencies within an industry setting. Practical demonstrations and opportunity for application are considered to provide the most suitable strategy to reflect the objectives of the course. Some areas of content may be common to more than one element or more than one unit, therefore integration may be appropriate. Delivery options should consider the grouping of learners and learning activities based on recognising their varying learning needs, educational backgrounds, preferred learning styles and individual constraints, and the specific requirements of each unit. Practical exercises may take the form of realistic, holistic projects to provide the learner with a 'real work' experience. The knowledge components of the course may be delivered using face-to-face, online or blended modes.
7.2 Resources	Resources that are essential for the delivery of the Certificate III in Musical Instrument Making and Maintenance and the Certificate IV in Musical Instrument Making and Repair include:

	• classroom and workshop facilities • a musical instrument making/manufacturing/repair real or simulated workplace that complies with standard and authorised work practices, safety requirements and environmental constraints • musical instrument making/manufacturing/repair materials, tools and equipment, including personal protective equipment • work/design briefs • a range of musical instruments for maintenance/repair • standard operating procedures/maker's specifications • computers with internet access. Trainers/assessors should refer to the individual units of competency for specific resource requirements. Training must be undertaken by a person or persons in accordance with: • Standard 1.4 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guideline 3 of the VRQA Guidelines for VET Providers, or the 2025 Standards for Registered Training Organisations (RTOs), or • the relevant standards and Guidelines for RTOs at the time of assessment. Units of competency imported from training packages must reflect the requirements for assessors specified in that training package.
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8. Pathways and articulation	Standard 5.10 AQTF 2021 Standards for Accredited Courses
	The Certificate III in Musical Instrument Making and Maintenance provides a pathway for the Certificate IV in Musical Instrument Making and Repair. Furthermore, both courses include units of competency from the BSB Business Services, CUA Creative Arts and Culture, MSF Furnishing, MSM Manufacturing, and TLI Transport and Logistics training packages. Completion of those units provide credit transfers/pathways into any qualifications or courses containing those units. There are no formal articulation arrangements for these courses.



9. Ongoing monitoring and evaluation	Standard 5.15 AQTF 2021 Standards for Accredited Courses
9.1 Monitoring and evaluation	The Curriculum Maintenance Manager (CMM) for Building and Construction is responsible for the ongoing monitoring and evaluation of the Certificate III in Musical Instrument Making and Maintenance and Certificate IV in Musical Instrument Making and Repair. Formal course evaluations will be undertaken halfway through the accreditation period and will be based on student and teacher evaluation surveys and industry stakeholder surveys/consultations. The Victorian Registration and Qualifications Authority (VRQA) will be notified of any significant changes required to the course.

Section C – Units of competency

Units of competency contained in the course

Units of competency developed for the course	
Code	Title
VU23989	Assemble instrument components
VU23990	Make acoustic guitars
VU23991	Make electric guitars
VU23992	Make percussion instruments
VU23993	Make brass instruments
VU23994	Make woodwind and aerophone instruments
VU23995	Make stringed instruments
VU23996	Make traditional stringed instruments
VU23997	Maintain and service acoustic guitars
VU23998	Maintain and service electric guitars
VU23999	Maintain and service percussion instruments
VU24000	Maintain and service brass instruments
VU24001	Maintain and service woodwind instruments
VU24002	Maintain and service stringed instruments

Units of competency developed for the course	
Code	Title
VU24003	Maintain and service traditional stringed instruments
VU24004	Construct and apply decorative treatments and finishes to musical instruments
VU24005	Develop and update music products industry knowledge
VU24006	Manufacture acoustic guitars
VU24007	Manufacture electric guitars
VU24008	Manufacture percussion instruments
VU24009	Manufacture brass instruments
VU24010	Manufacture woodwind instruments
VU24011	Manufacture stringed instruments
VU24012	Manufacture traditional stringed instruments
VU24013	Repair acoustic guitars
VU24014	Repair electric guitars
VU24015	Repair percussion instruments
VU24016	Repair brass instruments
VU24017	Repair woodwind instruments
VU24018	Repair aerophone instruments

Units of competency developed for the course	
Code	Title
VU24019	Repair stringed instruments
VU24020	Repair traditional stringed instruments

Units of competency imported from training packages	
Code	Title
BSBCMM511	Communicate with influence
BSBESB401	Research and develop business plans
BSBESB403	Plan finances for new business ventures
BSBOPS403	Apply business risk management processes
BSBSTR402	Implement continuous improvement
CUAACD101	Use basic drawing techniques
CUAACD313	Produce technical drawings
CUACAL311	Produce calligraphy
CUAPPR415	Develop and discuss ideas for own creative work
MSFFDM4006	Hand carve wood to custom design
MSFFDM4012	Produce computer-aided line and component production drawings
MSFFDM4015	Produce patterns and templates

Units of competency imported from training packages	
Code	Title
MSFFDM4017	Purchase materials and consumables
MSFFDM5007	Develop, trial and evaluate prototypes
MSFFDM5009	Generate and transfer complex computer-aided drawings and specifications
MSFFF2015	Apply stains, fillers and bleach
MSFFF2016	Apply surface coatings by hand
MSFFF3012	Apply plural component coatings
MSFFF3013	Apply soft rubber techniques
MSFFF3014	Enhance finishes
MSFFF3015	Repair and touch up surfaces
MSFFM2013	Use furniture making hand and power tools
MSFFM2018	Operate basic static machines safely
MSFFM3024	Construct jigs and fixtures
MSFFM3030	Produce manual and computer-aided production drawings
MSFGN2002	Move and store materials and products
MSFGN3005	Read and interpret work documents
MSFGN 3006	Estimate and cost job

Units of competency imported from training packages	
Code	Title
MSMENV272	Participate in environmentally sustainable work practices
MSMENV472	Implement and monitor environmentally sustainable work practices
MSMOPS101	Make measurements
MSMSUP102	Communicate in the workplace
MSMSUP106	Work in a team
MSMSUP383	Facilitate a team
MSMWHS200	Work safely
MSMWHS300	Facilitate the implementation of WHS for a work group
TLID0021	Store and handle dangerous goods and hazardous substances

Section C – Units of competency

Unit code	VU23989
Unit title	Assemble instrument components
Application	This unit describes performance outcomes, skills and knowledge required to assemble timber and or metal components of musical instruments. It requires the ability to plan for, prepare and assemble the instrument components, and conduct quality checks to ensure the quality of the assembled instrument. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for component assembly	1.1	Interpret and confirm the component assembly work order with supervisor.
		1.2	Discuss and confirm work instructions and safety requirements with supervisor.
		1.3	Confirm the required tools, equipment, materials and components to meet job requirements.

		1.4	Plan assembly sequence and procedures for checking quality at each stage of the process.
2	Prepare for component assembly	2.1	Select fixing and joining devices according to work instructions and type of materials to be joined.
		2.2	Select and prepare suitable work area for the task.
		2.3	Select and collect timber and or metal components, hardware, fittings and attachments.
		2.4	Select the required tools and equipment for fixing and check for safe operation.
		2.5	Select jigs and check for application.
3	Assemble components	3.1	Lay out components and join using jigs and appropriate fastenings.
		3.2	Use hand and/or power tools and equipment according to manufacturer specifications and safety requirements.
		3.3	Check assembled instrument for alignment and squareness, correct number and fittings of fasteners, hardware, fitting and attachments, conformity to work instruction and quality requirements.
		3.4	Repair, or tag components which do not meet quality specifications for further processing, recycling or disposal.
		3.5	Organise and store finished instruments in holding area according to standard operating procedures.
4	Finalise component assembly	4.1	Tag and report faulty and/or defective equipment according to standard operating procedures.
		4.2	Remove waste and scrap according to standard operating procedures.
		4.3	Clean, inspect tools and equipment for serviceable condition and store according to standard operating procedures.
		4.4	Clean and maintain work area according to workplace requirements and procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from the basic content of work orders and instructions, workplace procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.
Oral communication skills to:	actively listen and question to obtain information. discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	apply mathematical calculations for instrument assembly, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23989 Assemble instrument components	VU22991 Assemble instrument components	E

Assessment Requirements Template

Title	Assessment Requirements for VU23989 Assemble instrument components
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: assemble timber and or metal components for at least one musical instrument.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - work orders, specifications, drawings used to inform processes for assembling instrument components - properties of instrument components and sub-assemblies: - basic characteristics of timber and metal properties, products and defects - industry standard cross-sections and lengths - cutting patterns and sequences - safety requirements, legislation and procedures relating the assembly of instrument components: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice - standard operating procedures - manufacturer's specifications and operational procedures - environmental protection requirements relating to the disposal of waste material - reporting and recording requirements and procedures - storage and labelling at each stage of the assembly process. - process and stages of instrument assembly:

	• tests and checks used for each stage • problem identification and resolution within job parameters • types and maintenance of tools and equipment used for the assembly of instrument components.
Assessment Conditions	Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints. This includes access to: • materials and equipment relevant to the assembly of musical instrument components • specifications and work instructions. Assessor requirements No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23990
Unit title	Make acoustic guitars
Application	This unit describes the performance outcomes, skills and knowledge required to make acoustic guitars, with or without pickups, including acoustic bass guitars, from a design brief. It requires the ability to prepare and assemble the required components, finish the acoustic guitar surface and conduct checks and tests to ensure the quality of the finished guitar. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Confirm acoustic guitar design brief requirements	1.1	Interpret and confirm the acoustic guitar design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.

		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.
		1.4	Plan the assembly sequence of the acoustic guitar with supervisor.
2	Prepare to assemble acoustic guitar equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures.
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for acoustic guitar and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for acoustic guitar making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble acoustic guitar components	3.1	Rough out components of the acoustic guitar according to instruction and standard operating procedures.
		3.2	Cut, form, align, join and solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components using the required fastenings.
		3.4	Use fixing and joining devices according to materials type and work instructions.
		3.5	Produce acoustic guitar assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check acoustic guitar assembly for compliance against job requirements according to standard operating procedures and safety requirements.
		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage.

4	Finish acoustic guitar surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare acoustic guitar surface for finishing.
		4.3	Finish acoustic guitar surface according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise acoustic guitar making process	5.1	Undertake final quality checks and tests of the acoustic guitar with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.

Oral communication skills to:

discuss work requirements, outcomes and problems with supervisor using clear language and terminology.

Numeracy skills to:

apply mathematical calculations for guitar making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23990 Make acoustic guitars	VU22992 Make acoustic guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU23990 Make acoustic guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one acoustic guitar according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of acoustic guitars • design briefs, specifications, drawings used to inform making acoustic guitars • properties and components and sub-assemblies of acoustic guitars: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to acoustic guitar making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making acoustic guitars • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material • guitar making reporting and recording requirements and procedures

- instrument storage and labelling at each stage of the making process
- process and stages of making acoustic guitars:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make acoustic guitars
- types of materials used for acoustic guitar making:
 - characteristics of the items required in acoustic guitar making
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - glue chemistry and its effect on acoustic guitar making components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of an acoustic guitar
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23991
Unit title	Make electric guitars
Application	This unit describes the performance outcomes, skills and knowledge required to make solid or hallow body electric guitars, including electric bass guitars, from a design brief. It requires the ability to prepare and assemble the required components, finish the guitar surface and conduct checks and tests to ensure the quality of the finished guitar. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Confirm electric guitar design brief requirements	1.1	Interpret and confirm the electric guitar design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.
		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.

		1.4	Plan the assembly sequence of the electric guitar with supervisor.
2	Prepare to assemble electric guitar equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures.
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for the electric guitar and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for electric guitar making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble electric guitar components	3.1	Rough out components of the electric guitar according to instruction and standard operating procedures.
		3.2	Cut, form, align, join and solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components assembled using the required fastenings.
		3.4	Use fixing and joining devices according to materials type, work instructions.
		3.5	Produce electric guitar assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check electric guitar assembly for compliance to job requirements according to standard operating procedures and safety requirements.
		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage for supervisor inspection.

4	Finish electric guitar surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare electric guitar surface for finishing.
		4.3	Finish electric guitar surface according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise electric guitar making process	5.1	Undertake final quality checks and tests of the electric guitar with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.

Oral communication skills to:

discuss work requirements, outcomes and problems with supervisor using clear language and terminology.

Numeracy skills to:

apply mathematical calculations for guitar making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23991 Make electric guitars	VU22993 Make electric guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU23991 Make electric guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one electric guitar according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of electric guitars • design briefs, specifications, drawings used to inform making electric guitars • properties and components and sub-assemblies of electric guitars: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to electric guitar making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making electric guitars • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material • guitar making reporting and recording requirements and procedures

- instrument storage and labelling at each stage of the making process
- process and stages of making electric guitars:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make electric guitars
- types of materials used for electric guitar making
 - characteristics of the items required in electric guitar making
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - glue chemistry and its effect on electric guitar making components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of an electric guitar
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23992
Unit title	Make percussion instruments
Application	This unit describes the performance outcomes, skills and knowledge required to make percussion instruments, including drums, cymbals and mallet percussion instruments, from a design brief. It requires the ability to prepare and assemble the required components, finish the percussion instrument surface and conduct checks and tests to ensure the quality of the finished percussion instrument. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Confirm percussion instrument design brief requirements	1.1	Interpret and confirm the percussion instrument design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.
		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.

		1.4	Plan the assembly sequence of the percussion instrument with supervisor.
2	Prepare to assemble percussion instrument equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures.
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for the percussion instrument and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for percussion instrument making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble percussion instrument components	3.1	Rough out components of the percussion instrument according to instruction and standard operating procedures.
		3.2	Cut, form, align, join and solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components using the required fastenings.
		3.4	Use fixing and joining devices according to materials type, work instructions.
		3.5	Produce percussion instrument assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check percussion instrument assembly for compliance to job requirements according to standard operating procedures and safety requirements.

		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage for supervisor inspection.
4	Finish percussion instrument surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare percussion instrument surface for finishing.
		4.3	Paint electroplated percussion instrument according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise percussion instrument making process	5.1	Undertake final quality checks and tests of the percussion instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.



Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	apply mathematical calculations for percussion instrument making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23992 Make percussion instruments	VU22994 Make percussion instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU23992 Make percussion instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one percussion instrument according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of percussion instruments • design briefs, specifications, drawings used to inform making percussion instrument • properties and components and sub-assemblies of percussion instruments: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to percussion instrument making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making percussion instruments • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material • percussion instrument making reporting and recording requirements and procedures



- instrument storage and labelling at each stage of the making process
- process and stages of making percussion instruments:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make percussion instrument
- types of materials used for percussion instrument making
 - characteristics of the items required in percussion instrument making
 - colour theory and its application to materials used
 - basic characteristics of metal, timber and material products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - chemistry of adhesives and its effect on components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of a percussion instrument
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23993
Unit title	Make brass instruments
Application	This unit describes the performance outcomes, skills and knowledge required to make brass instruments including trumpets, trombones, French horns, tubas, and other brass instruments with piston valves, rotary valves or slides, from a design brief. It requires the ability to prepare and assemble the required components, finish the brass instrument surface and conduct checks and tests to ensure the quality of the finished instruments. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Confirm brass instrument design brief requirements	1.1	Interpret and confirm the brass instrument design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.
		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.

		1.4	Plan the assembly sequence of the brass instrument with supervisor.
2	Prepare to assemble brass instrument equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures.
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for the bass instrument and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for brass instrument making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble brass instrument components	3.1	Rough out components of the brass instrument according to instruction and standard operating procedures.
		3.2	Cut, form, align, join and solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components assembled using the required fastenings.
		3.4	Use fixing and joining devices according to materials type, work instructions.
		3.5	Produce brass instrument assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check brass instrument assembly for compliance to job requirements according to standard operating procedures and safety requirements.
		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage for supervisor inspection.

4	Finish brass instrument surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare brass instrument surface for finishing.
		4.3	Finish brass instrument surface according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise brass instrument making process	5.1	Undertake final quality checks and tests of the brass instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.

Oral communication skills to:

discuss work requirements, outcomes and problems with supervisor using clear language and terminology.

Numeracy skills to:

apply mathematical calculations for brass instrument making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23993 Make brass instruments	VU22995 Make brass instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU23993 Make brass instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one brass instrument according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of brass instruments • design briefs, specifications, drawings used to inform making brass instruments • properties and components and sub-assemblies of brass instruments: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to brass instruments making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making brass instruments • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material • instrument making reporting and recording requirements and procedures

- instrument storage and labelling at each stage of the making process
- process and stages of making brass instruments:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make brass instruments
- types of materials used for brass instrument making
 - characteristics of the items required in brass instrument making
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - chemistry of adhesives and its effect on brass instrument making components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of a brass instrument
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23994
Unit title	Make woodwind and aerophone instruments
Application	This unit describes the performance outcomes, skills and knowledge required to make woodwind and aerophone instruments from a design brief. Woodwind instruments refers to band and orchestral wind instruments including clarinets, saxophones, flutes, and double reed instruments such as oboes and bassoons. Aerophone instruments include any wind instrument that falls outside the definition of brass or woodwind, including harmonicas, reed organs, recorders, bagpipes and other traditional wind instruments. It requires the ability to prepare and assemble the required components, finish the woodwind and aerophone instrument surface and conduct checks and tests to ensure the quality of the finished guitar. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A
Element	Performance Criteria
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.



1	Confirm woodwind and aerophone instrument design brief requirements	1.1	Interpret and confirm the woodwind and aerophone instrument design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.
		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.
		1.4	Plan the assembly sequence of the woodwind and aerophone instrument with supervisor.
2	Prepare to assemble woodwind and aerophone instrument equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures.
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for the woodwind and aerophone instrument and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for woodwind and aerophone instrument making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble woodwind and aerophone instrument components	3.1	Rough out components of the woodwind and aerophone instrument according to instruction and standard operating procedures.
		3.2	Drill, cut, bore, form, bend, turn, machine, align, join or solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components assembled using the required fastenings.
		3.4	Use fixing and joining devices according to materials type, work instructions.



		3.5	Produce woodwind and aerophone instrument assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check woodwind and aerophone instrument assembly for compliance to job requirements according to standard operating procedures and safety requirements.
		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage for supervisor inspection.
4	Finish woodwind and aerophone instrument surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare woodwind and aerophone instrument surface for finishing.
		4.3	Finish woodwind and aerophone instrument surface according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise woodwind and aerophone instrument making process	5.1	Undertake final quality checks and tests of the woodwind and aerophone instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	apply mathematical calculations for woodwind and aerophone instrument making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23994 woodwind and aerophone instruments	VU22996 Make woodwind and aerophone instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU23994 Make woodwind and aerophone instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one woodwind or aerophone instrument according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of woodwind and aerophone instruments • design briefs, specifications, drawings used to inform making woodwind and aerophone instruments • properties and components and sub-assemblies of woodwind and aerophone instruments: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to woodwind and aerophone instrument making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making woodwind and aerophone instruments • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material

- woodwind and aerophone instrument making reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the making process
- process and stages of making woodwind and aerophone instruments:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make woodwind and aerophone instruments
- types of materials used for woodwind and aerophone instrument making
 - characteristics of the items required in woodwind and aerophone instrument making
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic characteristics of metals, metal products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - glue chemistry and its effect on woodwind and aerophone instrument making components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of a woodwind or aerophone instrument
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23995
Unit title	Make stringed instruments
Application	This unit describes the performance outcomes, skills and knowledge required to make bowed orchestral stringed instruments, including violins, violas, cellos and double bass, from a design brief. It requires the ability to prepare and assemble the required components, finish the stringed instrument surface and conduct checks and tests to ensure the quality of the finished instrument. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Confirm stringed instrument design brief requirements	1.1	Interpret and confirm the stringed instrument design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.
		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.

		1.4	Plan the assembly sequence of the stringed instrument with supervisor.
2	Prepare to assemble stringed instrument equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for the stringed instrument and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for stringed instrument making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble stringed instrument components	3.1	Rough out components of the stringed instrument according to instruction and standard operating procedures.
		3.2	Cut, form, align, join and solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components assembled using the required fastenings.
		3.4	Use fixing and joining devices according to materials type, work instructions.
		3.5	Produce stringed instrument assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check stringed instrument assembly for compliance to job requirements according to standard operating procedures and safety requirements.
		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage for supervisor inspection.

4	Finish stringed instrument surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare stringed instrument surface for finishing.
		4.3	Finish stringed instrument surface according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise stringed instrument making process	5.1	Undertake final quality checks and tests of the stringed instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.

Writing skills to:

complete basic work documents and job sheet.

Oral communication skills to:

discuss work requirements, outcomes and problems with supervisor using clear language and terminology.

Numeracy skills to:

apply mathematical calculations for stringed instrument making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23995 Make stringed instruments	VU22997 Make stringed instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU23995 Make stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one stringed instrument according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of stringed instruments • design briefs, specifications, drawings used to inform making stringed instruments • properties and components and sub-assemblies of stringed instruments: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to stringed instrument making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making stringed instruments • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material • guitar making reporting and recording requirements and procedures

- stringed instrument storage and labelling at each stage of the making process
- process and stages of making stringed instruments:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make stringed instruments
- types of materials used for stringed instrument making
 - characteristics of the items required in stringed instrument making
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - glue chemistry and its effect on stringed instrument making components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of a stringed instrument
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23996		
Unit title	Make traditional stringed instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to make traditional stringed instruments including banjos, mandolins, dulcimers, ukuleles and ouds from a design brief. Traditional stringed instruments refer to instruments with strings that are not guitars or bowed orchestral stringed instruments. It requires the ability to prepare and assemble the required components, finish the traditional stringed instrument surface and conduct checks and tests to ensure the quality of the finished instrument. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Confirm traditional stringed instrument design brief requirements	1.1	Interpret and confirm the traditional stringed instrument design brief with supervisor.
		1.2	Discuss and confirm job requirements and safety requirements to meet the brief with supervisor.

		1.3	Confirm the required tools, equipment, materials and components to meet job requirements with supervisor.
		1.4	Plan the assembly sequence of the traditional stringed instrument with supervisor.
2	Prepare to assemble traditional stringed instrument equipment and components	2.1	Select and use required personal protective equipment according to standard operating procedures.
		2.2	Select assembly tools and equipment according to job requirements.
		2.3	Obtain components for the traditional stringed instrument and arrange for assembly.
		2.4	Identify missing components according to the design brief.
		2.5	Obtain, check and safely handle required materials for traditional stringed instrument making and arrange ready for use.
		2.6	Identify and apply environmental workplace considerations and measures to reduce noise, dust and obstacles.
3	Assemble traditional stringed instrument components	3.1	Rough out components of the traditional stringed instrument according to instruction and standard operating procedures.
		3.2	Cut, form, align, join and solder materials according to professional standards, safety requirements and standard operating procedures.
		3.3	Lay out and assemble components assembled using the required fastenings.
		3.4	Use fixing and joining devices according to materials type, work instructions.
		3.5	Produce traditional stringed instrument assembly according to planned sequence of operations and safety requirements.
		3.6	Test and check traditional stringed instrument assembly for compliance to job requirements according to

			standard operating procedures and safety requirements.
		3.7	Handle and store components and/or assemblies safely in a manner least likely to cause damage for supervisor inspection.
4	Finish traditional stringed instrument surfaces	4.1	Prepare surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare traditional stringed instrument surface for finishing.
		4.3	Finish traditional stringed instrument surface according to customer requirements and standard operating procedures.
		4.4	Undertake ongoing checks of finishing quality according to professional standards and quality procedures.
5	Finalise traditional stringed instrument making process	5.1	Undertake final quality checks and tests of the traditional stringed instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Remove waste and scrap material for disposal and recycling according to standard operating procedures.
		5.3	Clean, check and maintain tools and equipment according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.



Skill	Description
Reading skills to:	interpret information from design brief, standard operating procedures, manufacturers specifications.
Writing skills to:	complete basic work documents and job sheet.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	apply mathematical calculations for traditional stringed instrument making, including estimation and measurement.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23996 Make traditional stringed instruments	VU22998 Make special stringed instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU23996 Make traditional stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • make at least one traditional stringed instrument according to design brief specifications.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types and features of traditional stringed instruments • design briefs, specifications, drawings used to inform making traditional stringed instruments • properties and components and sub-assemblies of traditional stringed instruments: • industry standard cross-sections and lengths • cutting patterns and sequences • safety requirements, legislation and procedures relating to traditional stringed instrument making: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for making traditional stringed instruments • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument making • environmental protection requirements relating to noise, dust and the disposal of waste material



- traditional stringed instrument making reporting and recording requirements and procedures
 - instrument storage and labelling at each stage of the making process
- process and stages of making traditional stringed instruments:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to make traditional stringed instruments
- types of materials used for traditional stringed instrument making
 - characteristics of the items required in traditional stringed instrument making
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of material to be soft soldered on the selection of consumables
 - properties of staining and finishing materials
 - glue chemistry and its effect on traditional stringed instrument making components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the making of a traditional stringed instrument
- supplied design brief
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23997
Unit title	Maintain and service acoustic guitars
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service acoustic guitars, with or without pickups, including acoustic bass guitars, from a work order. It requires the ability to prepare for, conduct the maintenance and service on the acoustic guitar and surface and carry out checks and tests to ensure the quality of the serviced guitar. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Prepare for maintenance and service of acoustic guitars	1.1	Interpret and confirm the customer requirements and work order for acoustic guitar maintenance and service with supervisor.
		1.2	Identify and confirm safety requirements for acoustic guitar maintenance and service task.

		1.3	Identify and confirm the required tools, equipment and materials for acoustic guitar maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct acoustic guitar maintenance and service	2.1	Clean and inspect acoustic guitar according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of acoustic guitar according to customer requirements and standard operating procedures.
3	Maintain acoustic guitar surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare acoustic guitar surface for finishing according to manufacturer's specifications.
		3.3	Maintain acoustic guitar surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.
4	Finalise acoustic guitar maintenance and service processes	4.1	Undertake final checks and tests of the quality of the acoustic guitar maintenance and service according to customer requirements, professional standards and practices and quality procedures.

		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23997 Maintain and service acoustic guitars	VU22999 Maintain and service acoustic guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU23997 Maintain and service acoustic guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - complete at least two of the following maintenance and service tasks for an acoustic guitar: - string replacement - refinish of minor scratch on surface - hand polish - tuning - basic rectifications of a non-structural nature.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of acoustic guitar maintenance and service - work orders used to inform acoustic guitar maintenance and service - safety requirements, legislation and procedures relating to acoustic guitar maintenance and service: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for maintaining and servicing acoustic guitars - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument maintenance and service - environmental protection requirements relating to the disposal of waste material

- guitar maintenance and service reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of acoustic guitar maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service acoustic guitars
- types of materials used for acoustic guitar maintenance and service:
 - characteristics of the items required for acoustic guitar maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - glue chemistry and its effect on acoustic guitar components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of an acoustic guitar
- an acoustic guitar
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23998
Unit title	Maintain and service electric guitars
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service solid or hallow body electric guitars, including electric bass guitars, from a work order. It requires the ability to prepare for, conduct the maintenance and service on the electric guitar and surface and carry out checks and tests to ensure the quality of the serviced guitar. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Prepare for maintenance and service of electric guitars	1.1	Interpret and confirm the customer requirements and work order for electric guitar maintenance and service with supervisor.
		1.2	Identify and confirm safety requirements for electric guitar maintenance and service task.

		1.3	Identify and confirm the required tools, equipment and materials for electric guitar maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct electric guitar maintenance and service	2.1	Clean and inspect electric guitar according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of electric guitar according to customer requirements and standard operating procedures.
3	Maintain electric guitar surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare electric guitar surface for finishing according to manufacturer's specifications.
		3.3	Maintain electric guitar surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.
4	Finalise electric guitar maintenance and service processes	4.1	Undertake final checks and tests of the quality of the electric guitar maintenance and service according to customer requirements, professional standards and practices and quality procedures.

		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23998 Maintain and service electric guitars	VU3000 Maintain and service electric guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU23998 Maintain and service electric guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - complete at least two of the following maintenance and service tasks for an electric guitar: - string replacement - refinish of minor scratch on surface - hand polish - tuning - basic rectifications of a non-structural nature.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of electric guitar maintenance and service - work orders used to inform electric guitar maintenance and service - safety requirements, legislation and procedures relating to electric guitar maintenance and service: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for maintaining and servicing electric guitars - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument maintenance and service - environmental protection requirements relating to the disposal of waste material

- guitar maintenance and service reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of electric guitar maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service electric guitars
- types of materials used for electric guitar maintenance and service:
 - characteristics of the items required for electric guitar maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - glue chemistry and its effect on electric guitar components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of an electric guitar
- an electric guitar
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU23999		
Unit title	Maintain and service percussion instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service percussion instruments, including drums, cymbals and mallet percussion instruments, from a work order. It requires the ability to prepare for, conduct the maintenance and service on the percussion instrument and surface and carry out checks and tests to ensure the quality of the serviced instrument. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Prepare for maintenance and service of percussion instruments	1.1	Interpret and confirm the customer requirements and work order for percussion instrument maintenance and service with supervisor.
		1.2	Identify and confirm safety requirements for percussion instrument maintenance and service task.

		1.3	Identify and confirm the required tools, equipment and materials for percussion instrument maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct percussion instrument maintenance and service	2.1	Clean and inspect percussion instrument according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of percussion instrument according to customer requirements and standard operating procedures.
3	Maintain percussion instrument surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare percussion instrument surface for finishing according to manufacturer's specifications.
		3.3	Maintain percussion instrument surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.
4	Finalise percussion instrument	4.1	Undertake final checks and tests of the quality of the percussion instrument maintenance and service according



	maintenance and service processes		to customer requirements, professional standards and practices and quality procedures.
		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU23999 Maintain and service percussion instruments	VU23001 Maintain and service percussion instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU23999 Maintain and service percussion instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - complete at least two of the following maintenance and service tasks for a percussion instrument: - cleaning and oiling metal surface - oiling bolts, screws, strainers and other moving parts - tensioning drum head - basic rectifications of a non-structural nature.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of percussion instrument maintenance and service - work orders used to inform percussion instrument maintenance and service - safety requirements, legislation and procedures relating to percussion instrument maintenance and service: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for maintaining and servicing percussion instruments - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument maintenance and service - environmental protection requirements relating to the disposal of waste material - percussion instrument maintenance and service reporting and recording requirements and procedures



- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of percussion instrument maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service percussion instruments
- types of materials used for percussion instrument maintenance and service:
 - characteristics of the items required for percussion instrument maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of material products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - basic chemistry of adhesives and its effect on percussion instrument components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of percussion instruments
- a percussion instrument
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24000		
Unit title	Maintain and service brass instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service brass instruments, including trumpets, trombones, French horns, tubas, and other brass instruments with piston valves, rotary valves or slides, from a work order. It requires the ability to prepare for, conduct the maintenance and service on the brass instrument and surface and carry out checks and tests to ensure the quality of the serviced instrument. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Prepare for maintenance and service of brass instruments	1.1	Interpret and confirm the customer requirements and work order for brass instrument maintenance and service with supervisor.

		1.2	Identify and confirm safety requirements for brass instrument maintenance and service task.
		1.3	Identify and confirm the required tools, equipment and materials for brass instruments maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct brass instrument maintenance and service	2.1	Clean and inspect brass instruments according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of brass instrument according to customer requirements and standard operating procedures.
3	Maintain brass instrument surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare brass instrument surface for finishing according to manufacturer's specifications.
		3.3	Maintain brass instrument surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.

4	Finalise brass instrument maintenance and service processes	4.1	Undertake final checks and tests of the quality of the brass instrument maintenance and service according to customer requirements, professional standards and practices and quality procedures.
		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24000 Maintain and service brass instruments	VU23002 Maintain and service brass instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24000 Maintain and service brass instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - complete at least two of the following maintenance and service tasks for a brass instrument: - joining broken solder joints - chemical/ultrasonic clean internal - replacing water key cork - alignment of hand slide - restringing of rotor valve and align levers.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of brass instrument maintenance and service - work orders used to inform brass instrument maintenance and service - safety requirements, legislation and procedures relating to brass instrument maintenance and service: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for maintaining and servicing brass instruments - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument maintenance and service - environmental protection requirements relating to the disposal of waste material

- brass instrument maintenance and service reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of brass instrument maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service brass instruments
- types of materials used for brass instrument maintenance and service:
 - characteristics of the items required for brass instrument maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of metal products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - glue chemistry and its effect on brass instrument components and their finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of brass instruments
- a brass instrument
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24001		
Unit title	Maintain and service woodwind instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service woodwind instruments, from a work order. Woodwind instruments refer to band and orchestral wind instruments including clarinets, saxophones, flutes, and double reed instruments such as oboes and bassoons. It requires the ability to prepare for, conduct the maintenance and service of the woodwind instrument and surface and carry out checks and tests to ensure the quality of the serviced instrument. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Prepare for maintenance and service of woodwind instruments	1.1	Interpret and confirm the customer requirements and work order for woodwind instrument maintenance and service with supervisor.

		1.2	Identify and confirm safety requirements for woodwind instrument maintenance and service task.
		1.3	Identify and confirm the required tools, equipment and materials for woodwind instrument maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct woodwind instrument maintenance and service	2.1	Clean and inspect woodwind instrument according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of woodwind instrument according to customer requirements and standard operating procedures.
3	Maintain woodwind instrument surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare woodwind instrument surface for finishing according to manufacturer's specifications.
		3.3	Maintain woodwind instrument surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.

4	Finalise woodwind instrument maintenance and service processes	4.1	Undertake final checks and tests of the quality of the woodwind instrument maintenance and service according to customer requirements, professional standards and practices and quality procedures.
		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24001 Maintain and service woodwind instruments	VU23005 Maintain and service woodwind instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24001 Maintain and service woodwind instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - complete at least two of the following maintenance and service tasks for a woodwind instrument: - head cork adjustment - replace neck - replace tenon cork - octave key realignment and regulation - replace pad and seat - close leak - regulate key timing of linked keys - remove loss motion - remove double action.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of woodwind instrument maintenance and service - work orders used to inform woodwind instrument maintenance and service - safety requirements, legislation and procedures relating to woodwind instrument maintenance and service: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for maintaining and servicing woodwind instruments - standard operating procedures - manufacturer's specifications and operational procedures

- hazard and emergency procedures in the finishing process of instrument maintenance and service
- environmental protection requirements relating to the disposal of waste material
- woodwind instrument maintenance and service reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of woodwind instrument maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service acoustic guitars
- types of materials used for woodwind instrument maintenance and service:
 - characteristics of the items required for woodwind instrument maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic characteristics of metals, metal products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - glue chemistry and its effect on woodwind instrument components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of woodwind instruments
- a woodwind instrument
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24002
Unit title	Maintain and service stringed instruments
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service bowed orchestral stringed instruments, including violins, violas, cellos and double bass, from a work order. It requires the ability to prepare for, conduct the maintenance and service of the stringed instrument and surface and carry out checks and tests to ensure the quality of the serviced stringed instrument. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Prepare for maintenance and service of stringed instruments	1.1	Interpret and confirm the customer requirements and work order for stringed instrument maintenance and service with supervisor.
		1.2	Identify and confirm safety requirements for stringed instrument maintenance and service task.

		1.3	Identify and confirm the required tools, equipment and materials for stringed instrument maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct stringed instrument maintenance and service	2.1	Clean and inspect stringed instrument according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of stringed instrument according to customer requirements and standard operating procedures.
3	Maintain stringed instrument surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare stringed instrument surface for finishing according to manufacturer's specifications.
		3.3	Maintain stringed instrument surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.
4	Finalise stringed instrument	4.1	Undertake final checks and tests of the quality of the stringed instrument maintenance and service according to



	maintenance and service processes		customer requirements, professional standards and practices and quality procedures.
		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24002 Maintain and service stringed instruments	VU23003 Maintain and service stringed instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24002 Maintain and service stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • complete at least two of the following maintenance and service tasks for a stringed instrument: • string replacement • refinish of minor scratch on surface • hand polish • tuning • basic rectifications of a non-structural nature.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types of stringed instrument maintenance and service • work orders used to inform stringed instrument maintenance and service • safety requirements, legislation and procedures relating to stringed instrument maintenance and service: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment • industry standards and codes of practice relevant to material use for maintaining and servicing stringed instruments • standard operating procedures • manufacturer's specifications and operational procedures • hazard and emergency procedures in the finishing process of instrument maintenance and service • environmental protection requirements relating to the disposal of waste material

- stringed instrument maintenance and service reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of stringed instrument maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service stringed instruments
- types of materials used for stringed instrument maintenance and service:
 - characteristics of the items required for stringed instrument maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - glue chemistry and its effect on stringed instrument components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of stringed instruments
- a stringed instrument
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24003		
Unit title	Maintain and service traditional stringed instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to maintain and service traditional stringed instruments including banjos, mandolins, dulcimers, ukuleles and ouds, from a work order. Traditional stringed instruments refer to instruments with strings that are not guitars or bowed orchestral stringed instruments. It requires the ability to prepare for, conduct the maintenance and service of the traditional stringed instruments and surface and carry out checks and tests to ensure the quality of the serviced instrument. This unit applies to individuals who maintain and service musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Prepare for maintenance and service of traditional stringed instruments	1.1	Interpret and confirm the customer requirements and work order for traditional stringed instrument maintenance and service with supervisor.

		1.2	Identify and confirm safety requirements for traditional stringed instrument maintenance and service task.
		1.3	Identify and confirm the required tools, equipment and materials for traditional stringed instrument maintenance and service tasks.
		1.4	Select and fit the required personal protective equipment for the maintenance and service task.
		1.5	Inspect and prepare work area to be used for maintenance and service tasks.
2	Conduct traditional stringed instrument maintenance and service	2.1	Clean and inspect traditional stringed instrument according to standard operating procedures.
		2.2	Determine maintenance and service requirements according to customer requirements and standard operating procedures.
		2.3	Report maintenance and service inspection outcomes to appropriate personnel.
		2.4	Select and use the required maintenance and service tools and materials according to standard operating procedures.
		2.5	Undertake maintenance and service of traditional stringed instrument according to customer requirements and standard operating procedures.
3	Maintain traditional stringed instrument surfaces	3.1	Prepare and assemble surface finish material and tools according to manufacturer's specifications and standard operating procedures.
		3.2	Prepare traditional stringed instrument surface for finishing according to manufacturer's specifications.
		3.3	Maintain traditional stringed instrument surface according to customer requirements and standard operating procedures.
		3.4	Undertake checks of finishing quality with supervising staff according to professional standards and practices and quality procedures.
		3.5	Dispose of waste according to standard operating procedures.



4	Finalise traditional stringed instrument maintenance and service processes	4.1	Undertake final checks and tests of the quality of the traditional stringed instrument maintenance and service according to customer requirements, professional standards and practices and quality procedures.
		4.2	Clean, return and secure tools and equipment and re-usable items according to standard operating procedures.
		4.3	Complete maintenance and service records and report to supervisor.
		4.4	Store maintenance and service records according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24003 Maintain and service traditional stringed instruments	VU23004 Maintain and service special stringed instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24003 Maintain and service traditional stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - complete at least two of the following maintenance and service tasks for a traditional stringed instrument: - string replacement - refinish of minor scratch on surface - hand polish - tuning - basic rectifications of a non-structural nature.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of traditional stringed instrument maintenance and service - work orders used to inform traditional stringed instrument maintenance and service - safety requirements, legislation and procedures relating to traditional stringed instrument maintenance and service: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for maintaining and servicing traditional stringed instruments - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument maintenance and service

- environmental protection requirements relating to the disposal of waste material
- traditional stringed instrument maintenance and service reporting and recording requirements and procedures
- instrument storage and labelling at each stage of the maintenance and service process
- process and stages of traditional stringed instrument maintenance and service:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to maintain and service traditional stringed instruments
- types of materials used for traditional stringed instruments maintenance and service:
 - characteristics of the items required for traditional stringed instruments maintenance and service
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - basic properties of ferrous and non-ferrous materials
 - effect of soft soldering materials and components, and procedures for rectifying minor defects in soldered joints
 - properties of staining and finishing materials
 - glue chemistry and its effect on traditional stringed instrument components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the maintenance and service of traditional stringed instruments
- a traditional stringed instrument
- specifications, work instructions and standard operating procedures.

Assessor requirements



No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24004		
Unit title	Construct and apply decorative treatments and finishes to musical instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to construct and apply decorative veneer, laminate and inlay treatments and finishes to musical instruments. It requires the ability to prepare for decorative treatments, cut and fit items, complete finishes and conduct checks to ensure the quality of the decorative work. This unit applies to individuals who make musical instruments. This role is usually performed under supervision and conducted in a music instrument manufacturing or retail work environment. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Confirm decorative treatments and finishes requirements	1.1	Review, confirm and clarify treatment and finish work order and job requirements with supervisor.

		1.2	Confirm the legislative and workplace safety requirements relevant to machining material and the construction and application of treatments and finishes to musical instruments.
		1.3	Determine the procedures for checking quality at each stage of the process.
		1.4	Plan the assembly sequence of the decorative treatment and finish.
2	Prepare for decorative treatments	2.1	Identify and check the work area, tools, equipment and personal protective equipment for safe and effective operation.
		2.2	Select and check materials for flaws and prepare cutting according to job requirements.
		2.3	Laid out design of the items according to job requirements.
		2.4	Select suitable joining points according to design.
3	Cut and fit items	3.1	Cut materials to required size and thickness.
		3.2	Cut design of items to job requirements.
		3.3	Undertake joining according to standard operating procedures.
		3.4	Apply adhesives according to standard operating procedures and manufacturer's specifications.
		3.5	Fit work according to standard operating procedures.
		3.6	Apply dyes or stains for colouring according to manufacturer's specifications.
		3.7	Check work against required quality standards and rectify any non-conformity.
4	Finalise decorative work process	4.1	Complete finishing of surfaces according to standard operating procedures.
		4.2	Inspect completed work for any imperfections and rectify imperfections according to standard operating procedures.
5	Clean up work area	5.1	Clean work area and maintain and store hand and power tools and equipment according to standard operating procedures.
		5.2	Tag and report faulty or defective equipment according to standard operating procedures.
		5.3	Clean machinery and leave in safe mode.

		5.4	Collect and store off-cuts and unused materials and stored for re-use or disposal according to standard operating procedures.
		5.5	Organise waste and scrap materials according to standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work orders, standard operating procedures and manufacturers specifications.
Writing skills to:	complete basic work documents and maintain service and quality records.
Oral communication skills to:	discuss work requirements, outcomes and problems with supervisor using clear language and terminology.
Numeracy skills to:	measure and calculate material quantities.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments

VU24004 Construct and apply decorative treatments and finishes to musical instruments

VU23006 Construct and apply decorative treatments and finishes to musical instruments

E

Assessment Requirements Template

Title	Assessment Requirements for VU24004 Construct and apply decorative treatments and finishes to musical instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan, prepare and complete construction and application of decorative work to a musical instrument that includes at least two of the following treatments and finishes: - decals - two pack paint - veneer inlays - engraving - markings.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of decorative treatments and finishes for musical instruments - work orders used to inform decorative treatments and finishes for musical instruments - safety requirements, legislation and procedures relating to constructing and applying decorative treatments and finishes: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for decorative treatments and finishes - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the decorative finishing process

- environmental protection requirements relating to the disposal of waste material
- storage and labelling in the construction of decorative treatments and finishes to musical instruments
- process and stages of constructing and applying decorative treatments and finishes:
 - cutting patterns and sequences
 - industry standard cross-sections and lengths
 - quality checks used for each stage
 - problem identification and resolution within job parameters
- types and maintenance of tools and equipment used to construct and apply decorative treatments and finishes:
 - set up and operation of equipment
 - computer programs
 - cutting tool condition assessment
- types of materials used for decorative treatments and finishes:
 - colour theory and its application to materials used
 - basic characteristics of timber, timber products and defects
 - properties of staining and finishing materials.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant construction and application of decorative treatments and finishes to musical instruments
- a musical instrument requiring decorative treatment and finish
- specifications, work instructions and standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24005
Unit title	Develop and update music products industry knowledge
Application	This unit describes the performance outcomes, skills and knowledge required to develop and update current information on the music products industry. It requires the ability to source and comprehend general music product industry information that includes industry structure, technology, and key legal and ethical issues that must be considered and applied by music industry workforce in their day-to-day work. This unit applies to individuals who manufacture and repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Source and apply general information on the structure and operation of the music products industry	1.1	Identify reliable sources of information on the structure and operation of the music products industry.

		1.2	Source and access information on current and emerging technologies that impact on the operations of the music products industry.
		1.3	Identify the potential effects of different technologies on the operations of the music products industry.
		1.4	Apply knowledge of the music products industry to enhance work performance.
		1.5	Monitor current issues of concern to the industry.
		1.6	Share updated information with colleagues and team members to incorporate in day-to-day activities.
2	Source and apply information on legal and ethical issues	2.1	Source information on legal and ethical issues that impact on the music products industry.
		2.2	Conduct day-to-day activities according to legal obligations and ethical industry practices.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from reliable sources about legal issues, industry accreditation schemes and codes of conduct.
Writing skills to:	take notes, summarise and record information in basic documents, such as information sheets, portfolios and files.

Oral communication skills to:

discuss research findings with colleagues and team members using clear language and terminology.

Digital literacy skills to:

use the internet to source and record reliable information.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24005 Develop and update music products industry knowledge	VU23008 Develop and update music products industry knowledge	E

Assessment Requirements Template

Title	Assessment Requirements for VU24005 Develop and update music products industry knowledge
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • source music product industry information relating to manufacturing and instrument repair and identify ways to apply this to own day-to-day activities • source information on emerging technologies and identify their potential effects on the music products industry • source information on legal issues and identify how these issues impact ethical work practices in own day-to-day activities.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types of information and research methods for sourcing reliable information on the music products industry • music products industry profile: • primary functions of the major cross-industry and sector-specific industry businesses, bodies and associations • legal and environmental issues and ethical work practices • instrument manufacturing processes • instrument repair processes • emerging technologies and its effect on the music products industry • music products industry labour market profile: • industry employment categories, types and career pathways • staff roles and responsibilities related to quality assurance processes • state, territory and local council laws relevant to music products industry: • occupational health and safety (OHS)/work health and safety (WHS) and worker's compensation • workplace relations



- environmental protection
- licensing, codes of conduct and industry accreditation schemes relevant to the music products industry.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- digital technology to obtain information
- information sources including industry association membership information, codes of conduct and accreditation information
- plain English documents that describe key music manufacture, repair and general workplace legislation.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24006
Unit title	Manufacture acoustic guitars
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture acoustic guitars, with or without pickups, including acoustic bass guitars, according to work orders. It requires the ability to plan and prepare for the manufacturing process, produce and finish the acoustic guitar surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for acoustic guitar manufacturing	1.1	Review, confirm and clarify acoustic guitar manufacturing work order with relevant people.
		1.2	Analyse and confirm customer requirements according to standard operating procedures.

		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of acoustic guitars.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for acoustic guitar manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the acoustic guitar according to standard operating procedures.
		2.2	Identify and acquire required jigs and templates for the manufacture of the acoustic guitar according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the acoustic guitar.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the acoustic guitar is compliant with the specifications and professional standards.
4	Finish acoustic guitar surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish acoustic guitar surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.



5	Finalise acoustic guitar manufacturing processes	5.1	Undertake final quality checks and tests of the acoustic guitar with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of acoustic guitars

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24006 Manufacture acoustic guitars	VU23009 Manufacture acoustic guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU24006 Manufacture acoustic guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the acoustic guitar manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one acoustic guitar according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform acoustic guitar manufacturing - safety requirements, legislation and procedures relating to the manufacture of acoustic guitars: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for acoustic guitar manufacturing - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material - storage systems and labelling in the manufacturing of acoustic guitars

- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of acoustic guitar manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for acoustic guitar manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for acoustic guitar manufacturing:
 - characteristics, capabilities and limitations of the timbers traditionally used for the manufacture of acoustic guitars
 - characteristics of non-timber materials used for the manufacture of acoustic guitars
 - colour theory and its application to materials used
 - properties of staining and finishing materials.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of acoustic guitars
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24007
Unit title	Manufacture electric guitars
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture solid or hollow body electric guitars, including electric bass guitars, according to work orders. It requires the ability to plan and prepare for the manufacturing process, produce and finish the electric guitar surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for electric guitar manufacturing	1.1	Review, confirm and clarify electric guitar manufacturing work order with relevant people.
		1.2	Analyse and confirm customer requirements according to standard operating procedures.

		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of electric guitars.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for electric guitar manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the electric guitar according to standard operating procedures.
		2.2	Identify and acquire required jigs and templates for the manufacture of the electric guitar according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the electric guitar.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the electric guitar is compliant with the specifications and professional standards.
4	Finish electric guitar surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish electric guitar surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.

5	Finalise electric guitar manufacturing processes	5.1	Undertake final quality checks and tests of the electric guitar with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of electric guitars.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24007 Manufacture electric guitars	VU23010 Manufacture electric guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU24007 Manufacture electric guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the electric guitar manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one electric guitar according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform electric guitar manufacturing - safety requirements, legislation and procedures relating to the manufacture of electric guitars: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for electric guitar manufacturing - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material - storage systems and labelling in the manufacturing of acoustic guitars

- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of electric guitar manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for electric guitar manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for electric guitar manufacturing:
 - characteristics, capabilities and limitations of the timbers traditionally used for the manufacture of electric guitars
 - characteristics of non-timber materials used for the manufacture of electric guitars
 - properties of staining and finishing materials
 - colour theory and its application to materials used
- glue chemistry and its effect on components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of electric guitars
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24008		
Unit title	Manufacture percussion instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture percussion instruments, including drums, cymbals and mallet percussion instruments, according to work orders. It requires the ability to plan and prepare for the manufacturing process, produce and finish the percussion instrument surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for percussion instrument manufacturing	1.1	Review, confirm and clarify percussion instrument manufacturing work order with relevant people.
		1.2	Analyse and confirm customer requirements according to standard operating procedures.

		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of percussion instruments.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for percussion instrument manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the percussion instrument according to standard operating procedures.
		2.2	Identify and acquire required jigs and templates for the manufacture of the percussion instrument according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the percussion instrument.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the percussion instrument is compliant with the specifications and professional standards.
4	Finish percussion instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish percussion instrument surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.



5	Finalise percussion instrument manufacturing processes	5.1	Undertake final quality checks and tests of the percussion instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of percussion instruments.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24008 Manufacture percussion instruments	VU23013 Manufacture percussion instrument	E

Assessment Requirements Template

Title	Assessment Requirements for VU24008 Manufacture percussion instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the percussion instrument manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one percussion instrument according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform percussion instrument manufacturing - safety requirements, legislation and procedures relating to the manufacture of percussion instruments: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for percussion instrument manufacturing - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material

- storage systems and labelling in the manufacturing of percussion instruments
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of percussion instrument manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for percussion instrument manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for percussion instrument manufacturing:
 - characteristics, capabilities and limitations of the metals traditionally used for the manufacture of percussion instruments
 - characteristics, capabilities and limitations of the percussion instruments being manufactured
 - properties of electroplating, painting and soldering materials
 - properties of staining and finishing materials
 - colour theory and its application to materials used
 - glue chemistry and its effect on components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of percussion instruments
- specifications and work order
- standard operating procedures.

Assessor requirements



No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24009
Unit title	Manufacture brass instruments
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture brass instruments, that include trumpets, trombones, French horns, tubas, and other brass instruments with piston valves, rotary valves or slides, according to work orders. It requires the ability to plan and prepare for the manufacturing process, produce and finish the brass instrument surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for brass instrument manufacturing	1.1	Review, confirm and clarify brass instrument manufacturing work order with relevant people.
		1.2	Analyse and confirm customer requirements according to standard operating procedures.

		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of brass instruments.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for brass instrument manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the brass instrument according to standard operating procedures.
		2.2	Identify and acquire required electroplating and soldering materials for the manufacture of the brass instrument according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the brass instrument.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, bend, align and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the brass instrument is compliant with the specifications and professional standards.
4	Finish brass instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish brass instrument surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise brass instrument	5.1	Undertake final quality checks and tests of the brass instrument with supervisor according to specifications,

	manufacturing processes		professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.
Numeracy skills to:	apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of brass instruments.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24009 Manufacture brass instruments	VU23014 Manufacture brass instrument	E

Assessment Requirements Template

Title	Assessment Requirements for VU24009 Manufacture brass instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the brass instrument manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one brass instrument according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform brass instrument manufacturing - safety requirements, legislation and procedures relating to the manufacture of brass instruments: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for brass instrument manufacturing - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material - storage systems and labelling in the manufacturing of brass instruments



- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of brass instrument manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for brass instrument manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for brass instrument manufacturing:
 - characteristics, capabilities and limitations of the metals traditionally used for the manufacture of brass instruments
 - characteristics, capabilities and limitations of the brass instruments being manufactured
 - properties of electroplating, painting and soldering materials
 - colour theory and its application to materials used
 - properties of staining and finishing materials.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of brass instruments
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24010		
Unit title	Manufacture woodwind instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture band and orchestral woodwind instruments, including clarinets, saxophones, flutes, and double reed instruments such as oboes and bassoons, according to work orders. It requires the ability to plan and prepare for the manufacturing process, produce and finish the woodwind instrument surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for woodwind instrument manufacturing	1.1	Review, confirm and clarify woodwind instrument manufacturing work order with relevant people.

		1.2	Analyse and confirm customer requirements according to standard operating procedures.
		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of woodwind instruments.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for woodwind instrument manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the woodwind instrument according to standard operating procedures.
		2.2	Identify and acquire required jigs and templates for the manufacture of the woodwind instrument according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the woodwind instrument.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, bent, align and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the woodwind instrument is compliant with the specifications and professional standards.
4	Finish woodwind instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish woodwind instrument surface according to customer requirements and standard operating procedures.

		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise woodwind instrument manufacturing processes	5.1	Undertake final quality checks and tests of the woodwind instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of woodwind instruments.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24010 Manufacture woodwind instruments	VU23015 Manufacture woodwind instrument	E

Assessment Requirements Template

Title	Assessment Requirements for VU24010 Manufacture woodwind instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the woodwind instrument manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one woodwind instrument according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform woodwind instrument manufacturing - safety requirements, legislation and procedures relating to the manufacture of woodwind instruments: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for manufacturing woodwind instruments - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material - storage systems and labelling in the manufacturing of woodwind instruments

- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of woodwind instrument manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for woodwind instrument manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for woodwind instrument manufacturing:
 - characteristics, capabilities and limitations of the metals traditionally used for the manufacture of woodwind instruments
 - characteristics, capabilities and limitations of the woodwind instruments being manufactured
 - properties of electroplating, painting and soldering materials
 - properties of staining and finishing materials
 - colour theory and its application to materials used
 - glue chemistry and its effect on components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of woodwind instruments
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24011		
Unit title	Manufacture stringed instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture bowed orchestral stringed instruments, including violins, violas, cellos and double bass, according to work orders. It requires the ability to plan and prepare for the manufacturing process, produce and finish the stringed instrument surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for stringed instrument manufacturing	1.1	Review, confirm and clarify stringed instrument manufacturing work order with relevant people.
		1.2	Analyse and confirm customer requirements according to standard operating procedures.

		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of stringed instrument.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for stringed instrument manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the stringed instrument according to standard operating procedures.
		2.2	Identify and acquire required jigs and templates for the manufacture of the stringed instrument according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the stringed instrument.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the stringed instrument is compliant with the specifications and professional standards.
4	Finish stringed instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish stringed instrument surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise stringed instrument	5.1	Undertake final quality checks and tests of the stringed instrument with supervisor according to specifications,



	manufacturing processes		professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.
Numeracy skills to:	apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of stringed instruments.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24011 Manufacture stringed instruments	VU23012 Manufacture stringed instrument	E

Assessment Requirements Template

Title	Assessment Requirements for VU24011 Manufacture stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the stringed instrument manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one stringed instrument according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform stringed instrument manufacturing - safety requirements, legislation and procedures relating to the manufacture of stringed instruments: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for stringed instrument manufacturing - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material - storage systems and labelling in the manufacturing of stringed instruments

- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of stringed instrument manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for stringed instrument manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for stringed instrument manufacturing:
 - characteristics, capabilities and limitations of the timbers traditionally used for the manufacture of stringed instruments
 - characteristics of non-timber materials used for the manufacture of stringed instrument
 - properties of staining and finishing materials
 - colour theory and its application to materials used
 - glue chemistry and its effect on components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of stringed instruments
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24012		
Unit title	Manufacture traditional stringed instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to manufacture traditional stringed instruments, including banjos, mandolins, dulcimers, ukuleles and ouds, according to work orders. Traditional stringed instruments refer to instruments with strings that are not guitars or bowed orchestral stringed instruments. It requires the ability to plan and prepare for the manufacturing process, produce and finish the traditional stringed instrument surface, conduct quality checks and complete production records as part of finalising the manufacturing processes. This unit applies to individuals who produce musical instruments in a manufacturing environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for traditional stringed instrument manufacturing	1.1	Review, confirm and clarify traditional stringed instrument manufacturing work order with relevant people.

		1.2	Analyse and confirm customer requirements according to standard operating procedures.
		1.3	Draw up specifications and identify required materials according to standard operating procedures.
		1.4	Verify legislative and organisational safety requirements relevant to machining material and the manufacture of traditional stringed instrument.
		1.5	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for traditional stringed instrument manufacturing	2.1	Obtain, inspect and test required materials for the manufacture of the traditional stringed instrument according to standard operating procedures.
		2.2	Identify and acquire required jigs and templates for the manufacture of the traditional stringed instrument according to standard operating procedures.
		2.3	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the manufacture of the traditional stringed instrument.
3	Manufacture instruments	3.1	Apply tools, jigs and equipment in the manufacturing process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of product quality in the manufacturing process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the acoustic guitar is compliant with the specifications and professional standards.
4	Finish traditional stringed instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and finish traditional stringed instrument surface according to customer requirements and standard operating procedures.

		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise acoustic guitar manufacturing processes	5.1	Undertake final quality checks and tests of the traditional stringed instrument with supervisor according to specifications, professional standards and practices and quality procedures.
		5.2	Complete production and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements in the manufacture of traditional stringed instruments.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24012 Manufacture traditional stringed instruments	VU23011 Manufacture special stringed instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24012 Manufacture traditional stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan and prepare for the traditional stringed instrument manufacturing process, and: - design and draw up specifications - obtain, test and set up materials and manufacturing equipment - manufacture and apply surface finish for at least one traditional stringed instruments according to work order and specifications - apply quality checks and finalise production records.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform traditional stringed instrument manufacturing - safety requirements, legislation and procedures relating to the manufacture of traditional stringed instruments: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for traditional stringed instrument manufacturing - standard operating procedures - manufacturer's specifications and operational procedures - hazard and emergency procedures in the finishing process of instrument manufacturing - environmental protection requirements relating to noise, dust and the disposal of waste material

- storage systems and labelling in the manufacturing of traditional stringed instruments
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of traditional stringed instruments manufacturing:
 - cutting patterns and sequences
 - cutting tool condition assessment
 - industry standard cross-sections and lengths
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for traditional stringed instrument manufacturing and procedures for their safe use, operation and maintenance
- types of materials used for traditional stringed instrument manufacturing:
 - characteristics, capabilities and limitations of the timbers traditionally used for the manufacture of traditional stringed instruments
 - characteristics of non-timber materials used for the manufacture of traditional stringed instruments
 - properties of staining and finishing materials
 - colour theory and its application to materials used
 - glue chemistry and its effect on components and finished surfaces.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the manufacture of traditional stringed instruments
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24013		
Unit title	Repair acoustic guitars		
Application	This unit describes the performance outcomes, skills and knowledge required to repair acoustic guitars, with or without pickups, including acoustic bass guitars, according to work orders. It requires the ability to plan and prepare for the repair process, repair the acoustic guitar and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for acoustic guitar repair	1.1	Review, confirm and clarify acoustic guitar repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.
		1.3	Confirm climatic conditions of guitar storage with customer.

		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of acoustic guitars.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for acoustic guitar repair	2.1	Clean and examine acoustic guitar and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the acoustic guitar according to standard operating procedures.
		2.3	Identify and acquire electroplating, soldering materials, jigs and templates for the repair of the acoustic guitar according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the acoustic guitar.
3	Repair instruments	3.1	Apply tools, jigs and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the acoustic guitar is compliant with the specifications and professional standards.
4	Repair acoustic guitar surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and repair finish for acoustic guitar according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.

5	Finalise acoustic guitar repair processes	5.1	Undertake final quality checks and tests of the acoustic guitar repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for acoustic guitar repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24013 Repair acoustic guitars	VU23016 Repair acoustic guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU24013 Repair acoustic guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • plan, prepare and conduct acoustic guitar repairs according to work order and specifications. Repairs must include at least ten of the following tasks: • action adjustment • bridge and headstock repair • electronics cleaning • fingerboard clean and conditioning • fret polish • guitar polish • intonating • machine head and nut inspection • neck adjustment • pickup height adjustment • pickup installs • re-string • refrets and fret dresses • reset acoustic bridge • strap button/strap lock installation • tuning.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types of work orders and specifications used to inform acoustic guitar repair • safety requirements, legislation and procedures relating to acoustic guitar repair:



- occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures
- personal protective equipment
- industry standards and codes of practice relevant to material use for acoustic guitar repair
- standard operating procedures
- manufacturer's specifications and operational procedures
- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of acoustic guitar repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for acoustic guitar repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of acoustic guitars:
 - faults in timber and/or repair components
 - glue chemistry and its effect on acoustic guitar components and finished surfaces
 - the impact of instrument structure on sound quality
 - guitar sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the acoustic guitar repair
- an acoustic guitar in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements



No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24014		
Unit title	Repair electric guitars		
Application	This unit describes the performance outcomes, skills and knowledge required to repair solid or hallow body electric guitars, including electric bass guitars, according to work orders. It requires the ability to plan and prepare for the repair process, repair the electric guitar and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for electric guitar repair	1.1	Review, confirm and clarify electric guitar repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.
		1.3	Confirm climatic conditions of guitar storage with customer.

		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of electric guitars.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for electric guitar repair	2.1	Clean and examine electric guitar and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the electric guitar according to standard operating procedures.
		2.3	Identify and acquire electroplating, soldering materials, jigs and templates for the repair of the electric guitar according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the electric guitar.
3	Repair instruments	3.1	Apply tools, jigs and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the electric guitar is compliant with the specifications and professional standards.
4	Repair electric guitar surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and repair finish for electric guitar surface according to customer requirements and standard operating procedures.

		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise acoustic guitar repair processes	5.1	Undertake final quality checks and tests of the electric guitar repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for electric guitar repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24014 Repair electric guitars	VU23017 Repair electric guitars	E

Assessment Requirements Template

Title	Assessment Requirements for VU24014 Repair electric guitars
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan, prepare and conduct electric guitar repair according to work order and specifications. Repairs must include at least ten of the following tasks: - action adjustment - bridge and headstock repair - electronics cleaning - fingerboard clean and conditioning - fret polish - guitar polish - intonating - machine head and nut inspection - neck adjustment - pickup height adjustment - pickup installs - re-string - refrets and fret dresses - reset electric bridge. - strap button/strap lock installation. - tuning.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform electric guitar repair - safety requirements, legislation and procedures relating to electric guitar repair:

- occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures
- personal protective equipment
- industry standards and codes of practice relevant to material use for electric guitar repair
- standard operating procedures
- manufacturer's specifications and operational procedures
- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of electric guitar repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for electric guitar repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of electric guitars:
 - faults in timber and/or repair components
 - glue chemistry and its effect on acoustic guitar components and finished surfaces
 - the impact of instrument structure on sound quality
 - guitar sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the electric guitar repair
- an electric guitar in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24015		
Unit title	Repair percussion instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to repair percussion instruments, including drums, cymbals and mallet percussion instruments, according to work orders. It requires the ability to plan and prepare for the repair process, repair the percussion instrument and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for percussion instrument repair	1.1	Review, confirm and clarify percussion instrument repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.
		1.3	Confirm climatic conditions of percussion instrument storage with customer.

		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of percussion instruments.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for percussion instrument repair	2.1	Clean and examine percussion instrument and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the percussion instrument according to standard operating procedures.
		2.3	Identify and acquire electroplating, soldering materials, jigs and templates for the repair of the percussion instrument according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the percussion instrument.
3	Repair instruments	3.1	Apply tools, jigs and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the percussion instrument is compliant with the specifications and professional standards.
4	Repair percussion instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and repair finish for repaired percussion instrument surface according to customer requirements and standard operating procedures.

		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise percussion instrument repair processes	5.1	Undertake final quality checks and tests of the percussion instrument repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for percussion instrument repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24015 Repair percussion instruments	VU23020 Repair percussion instrument	E

Assessment Requirements Template

Title	Assessment Requirements for VU24015 Repair percussion instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan, prepare and conduct percussion instrument repairs according to work order and specifications. Repairs must include at least five of the following tasks: - surface damage repair - electroplating - tonal and pitch adjustment - tensioning - soldering broken joints/components - felt and sleeve cymbal insertion - wire and cable replacement - drum head repair.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform percussion instrument repair - safety requirements, legislation and procedures relating to percussion instrument repair: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for percussion instrument repair - standard operating procedures - manufacturer's specifications and operational procedures

- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of percussion instrument repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for percussion instrument repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of percussion instruments
 - faults in timber, metals and/or repair components
 - glue chemistry and its effect on percussion instrument components and finished surfaces
 - the impact of instrument structure on sound quality
 - percussion instrument sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the percussion instrument repair
- a percussion instrument in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24016
Unit title	Repair brass instruments
Application	This unit describes the performance outcomes, skills and knowledge required to repair brass instruments, including trumpets, trombones, French horns, tubas, and other brass instruments with piston valves, rotary valves or slides, according to work orders. It requires ability to plan and prepare for the repair process, repair the brass instrument and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for brass instrument repair	1.1	Review, confirm and clarify brass instrument repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.

		1.3	Confirm climatic conditions of brass instrument storage with customer.
		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of brass instruments.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for brass instrument repair	2.1	Clean and examine brass instrument and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the brass instrument according to standard operating procedures.
		2.3	Identify and acquire electroplating and soldering materials for the repair of the brass instrument according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the brass instrument.
3	Repair instrument	3.1	Apply tools and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the brass instrument is compliant with the specifications and professional standards.
4	Repair brass instrument surface	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and repair finish for repaired brass instrument surface according to customer requirements and standard operating procedures.

		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise brass instrument repair processes	5.1	Undertake final quality checks and tests of the brass instrument repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for brass instrument repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24016 Repair brass instruments	VU23021 Repair brass instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24016 Repair brass instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan, prepare and conduct brass instrument repairs according to work order and specifications. Repair must be made to at least three brass instrument types and include at least nine of the following tasks: - bell dent repair - mouthpiece shank repair - joining broken solder joints - piston valve alignment - free stuck tuning slide - realign 1st or 3rd valve tuning slide - replace water key cork - remove dent from trombone hand slide outer - replace valve spring / valve guide - remove dent from tuning or slide crook - replace slide stop cork or bumper - remove and reinstall stuck rotor - restring rotor valve and align levers - replace rotor bumpers and align ports.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform brass instrument repair - safety requirements, legislation and procedures relating to brass instrument repair:

- occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures
- personal protective equipment
- industry standards and codes of practice relevant to material use for brass instrument repair
- standard operating procedures
- manufacturer's specifications and operational procedures
- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of brass instrument repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for brass instrument repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of brass instruments
 - faults in metal and/or repair components
 - glue chemistry and its effect on brass instrument components and finished surfaces
 - the impact of instrument structure on sound quality
 - brass instrument sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the brass instrument repair
- a brass instrument in need of repair
- specifications and work order

- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24017		
Unit title	Repair woodwind instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to repair band and orchestral woodwind instruments, including clarinets, saxophones, flutes, and double reed instruments such as oboes and bassoons, according to work orders. It requires the ability to plan and prepare for the repair process, repair the woodwind instrument and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for woodwind instrument repair	1.1	Review, confirm and clarify woodwind instrument repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.

		1.3	Confirm climatic conditions of woodwind instrument storage with customer.
		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of woodwind instruments.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for woodwind instrument repair	2.1	Clean and examine woodwind instrument and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the woodwind instrument according to standard operating procedures.
		2.3	Identify and acquire electroplating and soldering materials, for the repair of the woodwind instrument according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the woodwind instrument.
3	Repair instruments	3.1	Apply tools and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder metal and/or wood-based materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the woodwind instrument is compliant with the specifications and professional standards.
4	Repair woodwind instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.

		4.2	Prepare and touch up surfaces of repaired woodwind instrument according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise woodwind instrument repair processes	5.1	Undertake final quality checks and tests of the woodwind instrument repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.

Oral communication skills to:

use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for woodwind instrument repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24017 Repair woodwind instruments	VU23022 Repair woodwind instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24017 Repair woodwind instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • plan, and prepare and conduct woodwind instrument repairs, according to work order and specifications. Repairs must be made to at least three woodwind instrument types and include at least nine of the of the following: • head cork adjustment • octave key realignment and regulation • bell and bow • body alignment • pad and seat replacement • leak closure • regulation of key timing of linked keys • bridge tab alignment and regulation • neck replacement • tenon cork replacement • removal of dent from bow • inspect and level tone hole/refinish a tone hole • remove loss motion • remove double action • resolder a post • fit keywork • remove lateral play • replace key corks.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of:

- types of work orders and specifications used to inform woodwind instrument repairs
- safety requirements, legislation and procedures relating to woodwind instrument repairs:
 - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures
 - personal protective equipment
 - industry standards and codes of practice relevant to material use for woodwind instrument repair
 - standard operating procedures
 - manufacturer's specifications and operational procedures
 - hazard and emergency procedures in the finishing process of instrument repair
 - environmental protection requirements relating to noise, dust and the disposal of waste material
 - procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of woodwind instrument repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for woodwind instrument repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of woodwind instruments
 - faults in timber, metals and/or repair components
 - glue chemistry and its effect on woodwind instrument components and finished surfaces
 - the impact of instrument structure on sound quality
 - woodwind instrument sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the woodwind instrument repair
- a woodwind instrument in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24018
Unit title	Repair aerophone instruments
Application	This unit describes the performance outcomes, skills and knowledge required to repair aerophone instruments according to work orders. Aerophone instruments include any wind instrument that falls outside the definition of brass or woodwind, including harmonicas, reed organs, recorders, bagpipes and other traditional wind instruments. It requires the ability to plan and prepare for the repair process, repair and aerophone instrument and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for aerophone instrument repair	1.1	Review, confirm and clarify aerophone instrument repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.

		1.3	Confirm climatic conditions of aerophone instrument storage with customer.
		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of aerophone instruments.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for aerophone instrument repair	2.1	Clean and examine aerophone instrument and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the aerophone instrument according to standard operating procedures.
		2.3	Identify and acquire electroplating and soldering materials for the repair of the aerophone instrument according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the aerophone instrument.
3	Repair instruments	3.1	Apply tools and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Drill out, cut, bore, form, turn, machine, bend, align and join/ solder metal and/or wood-based woodwind instrument materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the aerophone instrument is compliant with the specifications and professional standards.
4	Repair aerophone instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.

		4.2	Prepare and repair finish of repaired aerophone instrument surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise aerophone instrument repair processes	5.1	Undertake final quality checks and tests of the aerophone instrument repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.

Oral communication skills to:

use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for aerophone instrument repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24018 Repair aerophone instruments	VU23023 Repair aerophone instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24018 Repair aerophone instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan, prepare and conduct aerophone instrument repairs, according to work order and specifications. Repairs must include at least five of the following tasks: - tuning - intonating - polishing - finger key clean and conditioning - key bending - reed replacement - machine bell and bow repair - strap installation - mouthpiece repair - joining components - corrosion removal.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform woodwind instrument repair - safety requirements, legislation and procedures relating to woodwind instrument repair: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment - industry standards and codes of practice relevant to material use for woodwind instrument repair

- standard operating procedures
- manufacturer's specifications and operational procedures
- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of woodwind instrument repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for woodwind instrument repair and procedures for their safe use, operation and maintenance
 - materials technology and information related to the repair of woodwind instrument
 - faults in timber, metal, materials and/or repair components
 - glue chemistry and its effect on woodwind instrument components and finished surfaces
 - the impact of instrument structure on sound quality
 - woodwind instrument sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to woodwind instrument repair
- a woodwind instrument in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements

No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24019
Unit title	Repair stringed instruments
Application	This unit describes the performance outcomes, skills and knowledge required to repair bowed orchestral stringed instruments, including violins, violas, cellos and double bass, according to work orders. It requires the ability to plan and prepare for the repair process, repair and stringed instrument and surface, conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
Pre-requisite Unit(s)	Nil
Competency Field	N/A
Unit Sector	N/A

Element		Performance Criteria	
Elements describe the essential outcomes of a unit of competency.		Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.	
1	Plan for stringed instrument repair	1.1	Review, confirm and clarify stringed instruments repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.
		1.3	Confirm climatic conditions of stringed instrument storage with customer.

		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair manufacture of stringed instruments.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for stringed instrument repair	2.1	Clean and examine stringed instrument and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the stringed instrument according to standard operating procedures.
		2.3	Identify and acquire electroplating, soldering materials, jigs and templates for the repair of the stringed instrument according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the stringed instrument.
3	Repair instruments	3.1	Apply tools, jigs and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the stringed instrument is compliant with the specifications and professional standards.
4	Repair stringed instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.
		4.2	Prepare and repair finish of repaired stringed instrument surface according to customer requirements and standard operating procedures.

		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise stringed instrument repair processes	5.1	Undertake final quality checks and tests of the stringed instrument repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.
Writing skills to:	complete specifications, work documents and job sheet using clear language and terminology.
Oral communication skills to:	use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for stringed instrument repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24019 Repair stringed instruments	VU23019 Repair stringed instruments	E

Assessment Requirements Template

Title	Assessment Requirements for VU24019 Repair stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: • plan, prepare and conduct stringed instrument repairs, according to work order and specifications. Repairs must include six of the following tasks: • re-string • tuning • intonating • neck adjustment • action adjustment • pickup height adjustment • stringed instrument polish • fingerboard clean and conditioning • electronics cleaning • machine head and nut inspection • bridge and headstock repair • pickup installs • reset bridge.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: • types of work orders and specifications used to inform stringed instrument repair • safety requirements, legislation and procedures relating to stringed instrument repair: • occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures • personal protective equipment

- industry standards and codes of practice relevant to material use for stringed instrument repair
- standard operating procedures
- manufacturer's specifications and operational procedures
- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of stringed instrument repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for stringed instrument repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of stringed instruments:
 - faults in timber and/or repair components
 - glue chemistry and its effect on stringed instrument components and finished surfaces
 - the impact of instrument structure on sound quality
 - stringed instrument sensitivity to differing environmental conditions.

Assessment Conditions

Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.

This includes access to:

- materials, tools and equipment relevant to the stringed instrument repair
- a stringed instrument in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements



No specialist vocational competency requirements for assessors apply to this unit.

Section C – Units of competency

Unit code	VU24020		
Unit title	Repair traditional stringed instruments		
Application	This unit describes the performance outcomes, skills and knowledge required to repair required to repair traditional stringed instruments, including banjos, mandolins, dulcimers, ukuleles and ouds, according to work orders. Traditional stringed instruments refer to instruments with strings that are not guitars or bowed orchestral stringed instruments. It requires the ability to plan and prepare for, repair and finish the repaired traditional stringed instrument surface and conduct quality checks and complete records as part of finalising repair processes. This unit applies to individuals who repair musical instruments in a music instrument manufacturing or retail work environment. These individuals may operate as a team leader, supervisor or small business owner. No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.		
Pre-requisite Unit(s)	Nil		
Competency Field	N/A		
Unit Sector	N/A		
Element	Performance Criteria		
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements.		
1	Plan for traditional stringed instrument repair	1.1	Review, confirm and clarify traditional stringed instrument repair work order with relevant people.
		1.2	Analyse and confirm customer requirements to determine repair feasibility.

		1.3	Confirm climatic conditions of traditional stringed instrument storage with customer.
		1.4	Draw up specifications and identify required materials according to standard operating procedures.
		1.5	Verify legislative and organisational safety requirements relevant to the repair of traditional stringed instruments.
		1.6	Establish and maintain communication with those involved with the work to ensure efficient workflow coordination, personnel cooperation and safety.
2	Prepare for traditional stringed instrument repair	2.1	Clean and examine traditional stringed instrument and determine required repair according to customer requirements and standard operating procedures.
		2.2	Obtain, inspect and test required materials for the repair of the traditional stringed instrument according to standard operating procedures.
		2.3	Identify and acquire electroplating, soldering materials, jigs and templates for the repair of the traditional stringed instrument according to standard operating procedures.
		2.4	Identify, select and obtain tools, test and measurement instruments, consumables and other equipment required for the repair of the traditional stringed instrument.
3	Repair instruments	3.1	Apply tools, jigs and equipment in the repair process according to professional standards and organisational requirements.
		3.2	Cut, form, align and join and solder materials according to professional standards and organisational requirements.
		3.3	Undertake ongoing checks of the repair process according to professional standards and practices and quality procedures.
		3.4	Interpret tests and observations to confirm the traditional stringed instrument is compliant with the specifications and professional standards.
4	Finish traditional stringed instrument surfaces	4.1	Prepare surface finish material according to manufacturer's specifications and standard operating procedures.

		4.2	Prepare and finish repaired traditional stringed instrument surface according to customer requirements and standard operating procedures.
		4.3	Undertake ongoing checks of finishing process according to professional standards and quality procedures.
5	Finalise traditional stringed instrument repair processes	5.1	Undertake final quality checks and tests of the traditional stringed instrument repairs according to specifications, professional standards and practices and quality procedures.
		5.2	Complete repair and other records according to organisational requirements.
		5.3	Check that waste and scrap materials are removed for disposal and recycling according to standard operating procedures.
		5.4	Check tools and equipment are cleaned and maintained according to manufacturer's specifications and standard operating procedures.

Range of conditions

N/A

Foundation Skills

Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance.

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

Skill	Description
Reading skills to:	interpret information from work order, standard operating procedures, manufacturers specifications.

Writing skills to:

complete specifications, work documents and job sheet using clear language and terminology.

Oral communication skills to:

use clear language and terminology to convey work requirements and specifications.

Numeracy skills to:

apply mathematical calculations to complete measurement, calculate area and volume and estimate other material requirements for traditional stringed instrument repairs.

Unit mapping

Code and title Current version	Code and Title Previous version	Comments
VU24020 Repair traditional stringed instruments	VU23018 Repair special stringed instrument	E

Assessment Requirements Template

Title	Assessment Requirements for VU24020 Repair traditional stringed instruments
Performance Evidence	The learner must demonstrate the ability to complete tasks outlined in the elements, performance criteria and foundation skills of this unit including evidence of the ability to: - plan, prepare and conduct traditional stringed instrument repairs, according to work order and specifications. Repairs must include six of the following tasks: - action adjustment - bridge and headstock repair - electronics cleaning - fingerboard clean and conditioning - intonating - machine head and nut inspection - neck adjustment - pickup height adjustment - pickup installs - re-string - reset bridge. - traditional stringed instrument polish - tuning.
Knowledge Evidence	The learner must be able to apply essential knowledge required to effectively do the tasks outlined in elements, performance criteria and foundation skills of this unit, including knowledge of: - types of work orders and specifications used to inform traditional stringed instrument repair - safety requirements, legislation and procedures relating to traditional stringed instrument repair: - occupational health and safety (OHS/work health and safety (WHS) legislation, regulations and workplace safety procedures - personal protective equipment

- industry standards and codes of practice relevant to material use for traditional stringed instrument repair
- standard operating procedures
- manufacturer's specifications and operational procedures
- hazard and emergency procedures in the finishing process of instrument repair
- environmental protection requirements relating to noise, dust and the disposal of waste material
- procedures for the recording, reporting and maintenance of workplace records and information
- processes and stages of traditional stringed instrument repair:
 - tests and checks used for each stage
 - problem identification and resolution within job parameters
- types of tools and equipment used for traditional stringed instrument repair and procedures for their safe use, operation and maintenance
- materials technology and information related to the repair of traditional stringed instruments:
 - faults in timber and/or repair components
 - glue chemistry and its effect on traditional stringed instrument components and finished surfaces
 - the impact of instrument structure on sound quality
 - traditional stringed instrument sensitivity to differing environmental conditions.

Assessment Conditions

- Skills in this unit must be demonstrated in a musical instrument making workplace or simulated environment that complies with standard and authorised work practices, safety requirements and environmental constraints.
- This includes access to:
- materials, tools and equipment relevant to the traditional stringed instrument repair
- a traditional stringed instrument in need of repair
- specifications and work order
- standard operating procedures.

Assessor requirements

- No specialist vocational competency requirements for assessors apply to this unit.