



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Piano Restoration and Tuning

registered by Organising Field 02, Culture and Arts, publishes the following qualification and unit standards for public comment.

This notice contains the titles, fields, subfields, NQF levels, credits, and purpose of the qualification and unit standards. The full qualification and unit standards can be accessed via the SAQA web-site at www.saga.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the qualification and unit standards should reach SAQA at the address **below and no later 19 February 2007**. All correspondence should be marked **Standards Setting – Piano Restoration and Tuning** addressed to

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| SAQA QUAL ID | | QUALIFICATION TITLE | |
|----------------------------------|-----------------|---|-------------------------|
| 5801 1 | | National Certificate: Acoustic Piano Back-framing | |
| SGB NAME | | ORGANISING FIELD ID | PROVIDER NAME |
| SGB Piano Restoration and Tuning | | 2 | |
| QUAL TYPE | | ORGANISING FIELD DESCRIPTION | SUBFIELD |
| National Certificate | | Culture and Arts | Music |
| ABET BAND | MINIMUM CREDITS | NQF LEVEL | QUALIFICATION CLASS |
| Undefined | 120 | Level 3 | Regular-Unit Stds Based |

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

This qualification naturally follows on from the qualification in piano restoration at NQF level 2.

The developmental approach in the design of the piano industry learning pathway means that the qualifying learners will add and enhance acquired competencies at NQF level 3.

It will help to professionalise the piano industry with trained and qualified personnel to render a professional service to the public. Dexterity and ear-hand coordination is necessary for a learner's success in repairing and restoring piano back-frames. It involves adjusting the variance on the action keys for optimum needs of the pianist.

This is the second qualification within a career pathway for Piano Restoration and Tuning leading to NQF level 5. The qualifying learner will apply an understanding of the acoustic piano and its functions in order to repair and/or restore the back-frame, including the action and keys. The core knowledge, skills and attitudes of this qualification for the piano repair and restoration workplace is aimed at both social and economic benefits for the learner.

The learner assessed as competent against this qualification will be able to:

- > Communicate in a variety of ways to achieve personal and organisational objectives.
- > Use mathematics and mathematical thinking to solve every day problems for oneself and the piano industry workplace.
- > Apply knowledge and skills of acoustic piano repairing and reconditioning.
- > Apply knowledge and skills of piano industry workshop operations.
- > Apply knowledge and skills for personal and career development.

Rationale:

This qualification will serve the interests of all those wishing to acquire skills needed for employment in the piano industry. The qualification is intended for all learners but especially those that are adult, unemployed, school leavers and physically challenged persons. This NQF level 3 qualification, builds on the competencies of the National Certificate in Piano Restoration at NQF level 2. The qualifying learner will work independently and be encouraged to make decisions. It will contribute to further skills development in the piano industry. The successful learners may go on to acquire competencies in regulating and tuning of acoustic pianos.

There is a growing number of piano users that require these services. This qualification will contribute to job creation and has the potential to create entrepreneurs in the piano industry. Piano tuners find themselves currently doing all the workshop and client service work and therefore require trained personnel to carry out

piano back-framing.

There is a shortage of trained personnel to repair and restore pianos. The South African Piano Tuners Association indicates that there are currently approximately fifty practitioners throughout the country. Currently there is no formal training in piano back-framing in South Africa. These circumstances portray an evident need for this qualification and will support the growth and development of the piano industry. This qualification will contribute to the establishment of standards for piano back-framing.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED TO BE IN PLACE

It would be desirable for learners wishing to access this Qualification to be competent at:

- > Language and Communication at NQF level 2.
- > Mathematical Literacy at NQF level 2.

Recognition of Prior Learning:

This Qualification and all the fundamental, core and elective Unit Standards associated with it as described in the rules of combination can be achieved by any learner through the recognition of prior learning, which includes learning outcomes achieved through formal, informal and non-formal learning and work experience. The exit-level outcomes and the related Unit Standards may also be achieved through the recognition of prior learning.

Access to the qualification:

There are no access limitations on any learners or classes of learners for this Qualification. It is recommended however that learners have dexterity and ear-hand coordination.

QUALIFICATION RULES

The qualifying learner will achieve this Qualification by complying with the following rules of combination for the accumulation of credits:

Learning component and credits:

- > All fundamental Unit Standards: 36
- > All core Unit Standards: 50
- > Elective Unit Standards: 34 min
- > Total Credits: 120 min

EXIT LEVEL OUTCOMES

1. Communicate in a variety of ways to provide piano back-frame repair and restoration services.
2. Use mathematics and mathematical thinking to solve every day problems for oneself, and the piano workplace organisation.
3. Apply knowledge and skills of acoustic piano repairing and reconditioning.
4. Apply knowledge and skills of piano industry workshop operations.
5. Apply knowledge and skills for personal and career development.

ASSOCIATED ASSESSMENT CRITERIA

1.
 - > Oral communication is maintained and adapted to meet workplace needs and personal expectations.
 - > Texts are interpreted and responded to in writing using a range of contexts in the provision of piano back-frame repair and restoration services.
 - > Language and communication is used to interpret and respond to texts in occupational learning programmes.
2.
 - > Statistics, probability and probability models are used to solve a range of contextual problems.
 - > Mathematical number systems, shape, and motion analysis are used to solve a range of life and work related problems.
 - > Mathematics is used to investigate and monitor the financial aspects of personal and workplace transactions.

3.

- > The function and anatomy of the human ear is explained in relation to the reception and transmission of sound of the acoustic piano.
- > The historical development and function of the acoustic piano back-frame is explained in terms of the piano industry.
- > Component parts of the acoustic piano back-frame are removed, repaired and assembled in accordance with piano workshop procedures.
- > Acoustic piano back-frame is rough tuned using chipping techniques as per standard piano industry practice.

4.

- > The condition of the acoustic piano back-frame is determined in relation to the viability of repairing or restoring.
- > Statutory rights, responsibilities and liability is explained regarding safety, health and the environment in a piano workshop.
- > Acoustic piano, repair materials and equipment are packed, loaded and delivered following organisational procedures.
- > Metal work techniques of welding and grinding are applied according to piano industry workshop procedures.
- > Laminated and profiled timber products are produced according to piano industry workshop procedures.

5.

- > Data, trends and guidelines are investigated and interpreted in relation to the impact of HIV/AIDS on the workplace and communities.
- > Computer operating system is operated and maintained following organisational procedures.
- > Learner's role in the work team and organisation is described and an action plan is developed to enhance team performance to meet organisational requirements.
- > Administrative records are compiled and completed, including sales transactions, following organisational procedures.

Integrated assessment:

Integrated assessment at the level of Qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across Unit Standards to achieve competence that is grounded and coherent in relation to the purpose of the Qualification. Integrated assessment should show how already demonstrated competence in individual areas can be linked and applied for the achievement of a holistic outcome as described in the exit level outcomes.

Integrated assessment must judge the quality of the observable performance, and also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will demand practical evidence while others may be more theoretical, depending on the type of outcomes to be assessed. The ratio between action and interpretation is not fixed, but varies according to the demands of the particular exit level outcome of the Qualification.

While the generic component (communication, mathematical literacy, supporting skills for the piano industry) of this Qualification at NQF Level 3 can be assessed through occupational contexts and activities relating to piano industry, care must be taken in both the learning programme and the assessment to ensure that learners achieve these foundational skills. The primary aim of this Qualification is to ensure that learners have a sound base of general education to prepare them for further learning, whatever career path they may choose. Learners must be able to transfer generic skills across a number of different contexts, and apply them within a number of learning areas.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

INTERNATIONAL COMPARABILITY

The skills and knowledge required in piano restoration are generally passed on to apprentices or gleaned through experience under mentors or expert guidance. Another source of such training is the Piano manufacturers that offer in-house training for **staff**. The range of learning offerings includes e-learning, distance learning and full-time study.

The most common approach is to access a short learning programme or a short course as is offered worldwide. Examples of some of these are:

- > Piano tuner's super home study course: www.pianotuning-course.com.
- > Randy Potter School of Piano Technology: www.pianotuning.com.
- > The American School of Piano Tuning: www.piano-tuning.com.
- > Escuela de Tecnologia Pianistica de Buenos Aires: Landolfi@lvd.com.ar.

The following institutions are examples of some institutions that offer full-time vocational courses:

- > Emil Fries School of Piano Tuning & Technology: www.pianotuningschool.org.
- > The Chicago School of Piano Technology: www.pianotechschool.com.
- > Oscar-Walcker-schule Ludwigsburg: Germany.
- > University of Western Ontario: www.pianotech.uwo.ca.

In most states of America and countries of Europe "piano repair" is offered as a short course or learning programme offered by private institutions. There appears to be limited nationally recognised training and education qualifications or competencies that can compare with this National Certificate: Acoustic Piano Back-framing at NQF level 3.

This National Certificate in Acoustic Piano Back-framing has been designed to develop the whole individual while the examples located develop a range of job related skills only. These courses and programmes are focussed only on vocational knowledge and skills. In this sense there is a differing emphasis in the qualification for the learners. This National Certificate at NQF level 3, although for a South African context, has been compared with Qualifications from these countries:

- > Australia
- > New Zealand
- > United Kingdom
- > United States of America

This qualification has been benchmarked against the United Kingdom (Qualifications and Curriculum Authority) vocationally related qualification, Level 3 Certificate in Classical Musical Instrument Technology (100/2628/9). This qualification was chosen because it is of a similar duration, competencies and complexity. Both qualifications are registered at level 3 on the respective frameworks.

The United Kingdom approach is informed by the learning pathway for Piano Maintenance, Tuning and Toning Pathway. Elements of this qualification are used in related careers or learning pathways. While this National Certificate is dedicated to the repair of one classical instrument, the acoustic piano (Upright), the benchmarked qualification offers electives for the repair of a range of classical musical instruments. Furthermore, for the purpose of this comparison the Fundamental component of learning has not been included.

The units of learning comprising these qualifications are presented in the table below with the hours of learning.

Certificate in Classical Musical Instrument Technology (Level 3):

Guided Learning Hours: Unit Title:

- > 60; Acoustics.
- > 60; Introduction to business planning.
- > 60; Piano: Maintenance.
- > 120; Upright piano pitch and fine tuning.
- > 120; Piano: Design and theoretical aspects of maintenance, tuning and toning.
- > 120; Upright piano fine tuning.
- > 60; Grand piano fine tuning.
- > 60; Grand piano pitch and fine tuning.
- > 60; Piano: Toning.

National Certificate in Piano Back-framing at NQF level 3:

Notional Hours; Unit Standard Title:

- > 20; Explain sound and acoustics of the acoustic piano.
- > 50; Evaluate acoustic piano.
- > 180; Refurbish acoustic piano back-frame.
- > 150; Chip acoustic piano back-frame.
- > 40; Explain the development and function of the acoustic piano back-frame.

From above, a clear similarity between these qualifications can be detected. While the unit or unit standard titles are not exactly the same, the specific outcomes and assessment criteria reveal a close similarity between these unit standards of the qualifications. Furthermore, the competency of repairing and tuning an Acoustic Piano refers to both Grand and Upright. This South African qualification was designed to be generic across both these piano types.

The difference in these qualifications relates to fine tuning and toning competencies. For this purpose, a qualification at NQF level 4 will be generated.

ARTICULATION OPTIONS

The possibility exists for vertical articulation with this Qualification. Examples of vertical articulation:

- > FETC: Music Industry: Sound technology at NQF level 4 (NLRD ID 4881)
- > FETC: Furniture Making at NQF level 4 (NLRD ID 49092).

Examples of horizontal articulation with this Qualification:

- > National Certificate: Welding application and practice at NQF level 3 (NLRD ID 24213).

MODERATION OPTIONS

- > Any institution offering learning that will enable achievement of this Qualification must be accredited by the relevant ETQA.
- > External Moderation of assessment will be overseen by the relevant ETQA at its discretion.
- > The accredited Training Provider will oversee internal Moderation of assessment.
- > Moderation should encompass achievement of competence described in both individual Unit Standards as well as the integrated competence described in the Qualification.
- > Moderation must also encompass achievement of the competencies described in the exit level outcomes described above.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

> Assessors must be registered as assessors with a relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.

> Assessors must be in possession of a Qualification in Piano Restoration and Tuning or a related sub-field in Culture and Arts at a minimum of NQF level 4.

NOTES

N/A

| | UNIT STANDARD ID AND TITLE | LEVEL | CREDITS | STATUS |
|----------|--|---------|---------|----------------------------|
| Core | 13223 Apply safety, health and environmental protection procedures | Level 3 | 6 | Reregistered |
| Core | 114941 Apply knowledge of HIV/AIDS to a specific business sector and a workplace | Level 3 | 4 | Registered |
| core | 243305 Evaluate the acoustic piano | Level 3 | 5 | Draft - Prep for P Comment |
| core | 243306 Explain sound and acoustics of the acoustic piano | Level 3 | 2 | Draft - Prep for P Comment |
| core | 243308 Explain the development and function of the acoustic piano back-frame | Level 3 | 4 | Draft - Prep for P Comment |
| core | 243310 Chip acoustic piano back-frame | Level 3 | 15 | Draft - Prep for P Comment |
| core | 243313 Refurbish the acoustic piano back-frame | Level 3 | 18 | Draft - Prep for P Comment |
| Elective | 8144 Complete sales transactions | Level 2 | 6 | Reregistered |
| Elective | 12465 Develop a learning plan and a portfolio for assessment | Level 2 | 6 | Reregistered |
| Elective | 117144 Produce straight laminated timber and board components | Level 2 | 8 | Registered |
| Elective | 12255 Weld workpieces with the gas metal arc welding process in all positions | Level 3 | 15 | Reregistered |
| Elective | 13297 Grind tools and drill bits | Level 3 | 4 | Registered |
| | | | | |

| | | | | |
|-----------------|---|---------|----|-------------------|
| Elective | 13912 Apply knowledge of self and team in order to develop a plan to enhance team performance | Level 3 | 5 | Reregistered |
| Elective | 114979 Operate a computer workstation in a business environment | Level 3 | 2 | Registered |
| Elective | 115878 Load and deliver stock | Level 3 | 5 | Registered |
| Elective | 117388 Produce profiled timber and board product components and products | Level 3 | 16 | Registered |
| Elective | 242820 Maintain records for a team | Level 3 | 4 | Registered |
| Fundamental | 7456 Use mathematics to investigate and monitor the financial aspects of personal, business and national issues | Level 3 | 5 | Reregistered |
| Fundamental | 9010 Demonstrate an understanding of the use of different number bases and measurement units and an awareness of error in the context of relevant calculations | Level 3 | 2 | Reregistered |
| Fundamental | 9012 Investigate life and work related problems using data and probability | Level 3 | 5 | Reregistered |
| Fundamental | 9013 Describe, apply, analyse and calculate shape and motion in 2- and 3-dimensional space in different contexts | Level 3 | 4 | Reregistered |
| Fundamental | 119457 Interpret and use information from texts | Level 3 | 5 | Registered |
| Fundamental | 119465 Write/present/sign texts for a range of communicative contexts | Level 3 | 5 | Registered |
| Fundamental | 119467 Use language and communication in occupational learning programmes | Level 3 | 5 | Registered |
| Fundamental | 119472 Accommodate audience and context needs in oral/signed communication | Level 3 | 5 | Registered |



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UNIT STANDARD:

I

| SAQA US ID | UNIT STANDARD TITLE | | |
|----------------------------------|------------------------------|----------------------|--------------------|
| 243305 | Evaluate the acoustic piano | | |
| SGB NAME | ORGANISING FIELD ID | PROVIDER NAME | |
| SGB Piano Restoration and Tuning | 2 | | |
| UNIT STANDARD TYPE | ORGANISING FIELD DESCRIPTION | SUBFIELD DESCRIPTION | |
| Regular | Culture and Arts | Music | |
| ABET BAND | CREDITS | NQF LEVEL | UNIT STANDARD TYPE |
| Undefined | 5 | Level 3 | Regular |

SPECIFIC OUTCOME 1

Record characteristics of acoustic piano.

SPECIFIC OUTCOME 2

Determine the condition of the acoustic piano.

SPECIFIC OUTCOME 3

Determine the condition of the acoustic piano back-frame.

SPECIFIC OUTCOME 4

Establish the viability of repairing and restoring the acoustic piano.



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UNIT STANDARD:

2

| SAQA US ID | UNIT STANDARD TITLE | | |
|----------------------------------|---|-----------------------------|---------------------------|
| 243306 | Explain sound and acoustics of the acoustic piano | | |
| SGB NAME | ORGANISING FIELD ID | PROVIDER NAME | |
| SGB Piano Restoration and Tuning | 2 | | |
| UNIT STANDARD TYPE | ORGANISING FIELD DESCRIPTION | SUBFIELD DESCRIPTION | |
| Regular | Culture and Arts | Music | |
| ABET BAND | CREDITS | NQF LEVEL | UNIT STANDARD TYPE |
| Undefined | 2 | Level 3 | Regular |

SPECIFIC OUTCOME 1

Explain the anatomy and function of the human ear.

SPECIFIC OUTCOME 2

Explain the concept of sound.

SPECIFIC OUTCOME 3

Explain the transmission of sound in the acoustic piano.



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UNIT STANDARD:

3

Explain the development and function of the acoustic piano back-frame

| SAQA US ID | UNIT STANDARD TITLE | | |
|----------------------------------|---|-----------------------------|---------------------------|
| 243308 | Explain the development and function of the acoustic piano back-frame | | |
| SGB NAME | ORGANISING FIELD ID | PROVIDER NAME | |
| SGB Piano Restoration and Tuning | 2 | | |
| UNIT STANDARD TYPE | ORGANISING FIELD DESCRIPTION | SUBFIELD DESCRIPTION | |
| Regular | Culture and Arts | Music | |
| ABET BAND | CREDITS | NQF LEVEL | UNIT STANDARD TYPE |
| Undefined | 4 | Level 3 | Regular |

SPECIFIC OUTCOME 1

Understand the historical development of the acoustic piano design.

SPECIFIC OUTCOME 2

Understand the historical development of the acoustic piano back-frame.

SPECIFIC OUTCOME 3

Describe the materials used in the modern acoustic piano back-frame.

SPECIFIC OUTCOME 4

Describe the function of the acoustic piano back-frame.



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UNIT STANDARD:

4

Chip acoustic piano back-frame

| SAQA US ID | UNIT STANDARD TITLE | | |
|----------------------------------|--------------------------------|----------------------|--------------------|
| 243310 | Chip acoustic piano back-frame | | |
| SGB NAME | ORGANISING FIELD ID | PROVIDER NAME | |
| SGB Piano Restoration and Tuning | 2 | | |
| UNIT STANDARD TYPE | ORGANISING FIELD DESCRIPTION | SUBFIELD DESCRIPTION | |
| Regular | Culture and Arts | Music | |
| ABET BAND | CREDITS | NQF LEVEL | UNIT STANDARD TYPE |
| Undefined | 15 | Level 3 | Regular |

SPECIFIC OUTCOME 1

Identify, name and describe tools used in chipping up of the back-frame.

SPECIFIC OUTCOME 2

Recognise and set beats as applicable to chipped unisons and octaves.

SPECIFIC OUTCOME 3

Recognise and set beats as applicable to a dead 4th and 5th chipping scale.



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UNIT STANDARD:

5

| SAQA US ID | UNIT STANDARD TITLE | | |
|---------------|---|------------------------------|----------------------|
| 243313 | Refurbish the acoustic piano back-frame | | |
| Tuning | | | |
| LEARNING AREA | TYPE | ORGANISING FIELD DESCRIPTION | SUBFIELD DESCRIPTION |
| Religion | | Culture and Arts | Music |
| LEARNING BAND | CREDITS | NQF LEVEL | UNIT STANDARD NUMBER |
| Level 3 | 18 | Level 3 | 243313 |

SPECIFIC OUTCOME 1

Strip back-frame.

SPECIFIC OUTCOME 2

Replace pin block.

SPECIFIC OUTCOME 3

Repair bridges and sound board.

SPECIFIC OUTCOME 4

Assemble repaired component parts of the acoustic piano.

SPECIFIC OUTCOME 5

Supply bass strings for acoustic piano.