

National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 1)
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NQF Level of qualification: 1

Total credits available: 84

Total credits required: 84

	Compulsory	Elective
level 3 credits available	6	-
level 2 credits available	9	-
level 1 credits available	69	-
minimum totals required	84	-

Registration date: 31 May 2018

Scheduled review date: 2023

Body responsible for the qualification: Namibia Training Authority (NTA) through the Mining and Quarrying, Construction, Electricity, Gas, Water Supply and Sanitation Industry Skills Committee (ISC).

Other bodies whose unit standards are included in the qualification: None

1 purpose

This qualification recognises people who have the competencies required for performing basic plumbing tasks. It is awarded to people who have demonstrated the skills and knowledge required to apply occupational health and safety in working environment, use and maintain hand tools used in plumbing operations, handle and store plumbing materials, read and produce basic sketches and drawings used in plumbing operations, carry out basic excavation and backfilling as part of plumbing operations, perform basic estimations, measurements and calculations as part of plumbing operations, plan and organise plumbing work, perform basic pipe-work as part of plumbing operations, carry out maintenance of domestic plumbing installations, install and adjust water service controls and devices, install and fit sanitary fixtures as part of plumbing operations. They further have a good understanding of demonstrating basic awareness of HIV and AIDS, provide basic first aid, apply basic numeracy skills in workplace environment, apply basic reading skills in a workplace environment, interact with others in a workplace environment, use workplace documents, apply basic entrepreneurship skills, apply knowledge of basic building drawing in different contexts, demonstrate basic knowledge of workplace health and safety and apply fundamental computer literacy skills.

This qualification leads to the National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 2).

2 regulations for the qualification

2.1 summaries of qualification requirements

The entry requirement for this qualification is the ability to demonstrate basic communication skills in English language and numeracy

This qualification will be awarded to people who are credited with 84 credits and have met the requirements of the compulsory sections as well as all the requirements for Workplace Integrated Learning (WIL) as laid out in the National Policy on Work-Integrated Learning for Technical Vocational Education and Training (TVET).

2.2 detailed qualification requirements

Compulsory

All the unit standards listed below are required.

FIELD: Physical, Planning and Construction
 Subfield: Civil and Building Services Engineering
 Domain: Plumbing

Unit No.	Unit Standard Title	Level	Credit
434	Apply Occupational Health and Safety in Working Environment	1	2
435	Use and maintain hand tools used in plumbing operations	1	2
436	Handle and store plumbing materials	1	2
437	Read and produce basic sketches and drawings used in plumbing operations	1	2
1912	Carry out basic excavation and backfilling as part of plumbing operations	2	4
439	Perform basic estimations, measurements and calculations as part of plumbing operations	1	2
440	Plan and organise plumbing work	1	2
444	Perform basic pipe-work as part of plumbing operations	1	4
445	Carry out maintenance of domestic plumbing installations	1	6
456	Install and adjust water service controls and devices	2	5
467	Install and fit sanitary fixtures as part of plumbing operations	3	6

AND

FIELD: Health Sciences and Social Services
 Subfield: Core Health
 Domain: HIV and AIDS awareness

Unit No.	Unit Standard Title	Level	Credit
1155	Demonstrate Basic Awareness of HIV and AIDS	1	6

AND

FIELD: Health Sciences and Social Services
 Subfield: Core Health
 Domain: First Aid

Unit No.	Unit Standard Title	Level	Credit
843	Provide Basic First Aid	1	3

AND

FIELD: Physical, Mathematical and Computer Studies
 Subfield: Numeracy
 Domain: Foundation Numeracy Skills

Unit No.	Unit Standard Title	Level	Credit
1153	Apply basic numeracy skills in a workplace environment	1	5

AND

FIELD: Communication Studies and Languages
 Subfield: Communication Skills
 Domain: Foundation Communication Skills

Unit No.	Unit Standard Title	Level	Credit
1150	Apply basic reading skills in a workplace environment	1	3
1151	Interact with others in a workplace environment	1	5
1152	Use workplace documents	1	5

AND

FIELD: Financial and Business Services
 Subfield: Business Development
 Domain: Entrepreneurship

Unit No.	Unit Standard Title	Level	Credit
1158	Apply basic entrepreneurship skills	1	5

AND

FIELD: Health Sciences and Social Services
 Subfield: Preventive health
 Domain: Occupational Health and Safety

Unit No.	Unit Standard Title	Level	Credit
1157	Demonstrate basic knowledge of workplace health and safety	1	7

AND

FIELD: Physical, Mathematical and Computer Studies
 Subfield: Information Communication Technology
 Domain: Computing Fundamentals

Unit No.	Unit Standard Title	Level	Credit
1156	Apply fundamental computer literacy skills	1	8

3 Credit recognition and transfer arrangements

Credits for any version of a unit standard of the same identification number will be recognised in the award of this qualification.

4 Special Arrangements

4.1 Providers seeking registration and/or accreditation to deliver this qualification must meet the following special arrangements.

4.1.1 Providers involved in the assessment of this qualification and the associated unit standards must comply with the national assessment framework for the TVET system up to and including level 5 of the National Qualifications Framework. Assessment will include performance and achievement assessment acquired through work integrated learning periods. Assessment arrangements apply to all occupations and industries which are encompassed in the technical vocational education and training sector.

4.1.2 Providers of this qualification and the associated unit standards must be registered and/or accredited.

4.1.3 Providers of this qualification and their associated unit standards must have access to all equipment and facilities detailed in the tools and equipment list of the relevant training program.

4.2 Competencies covered in this qualification may be assessed through Recognition of Prior Learning (RPL).

4.3 Further relevant information and documentation may be accessed through:

Namibia Training Authority

Rand Street

Khomasdal

Namibia

Telephone number: 061 207 8550

Facsimile number: 061 207 8551

5 Transition arrangements

5.1 Non National Qualifications Framework transition

None.

5.2 National Qualifications Framework transition

Version 2

This qualification was updated and issued as Version 2 in 2018.

Version 1 of this qualification will not be awarded as from 31 December 2020. People currently working towards Version 1 of this qualification are advised to transfer their existing credit awards to this version of the qualification at any time during 2019 and beyond.

People holding the earlier version of this qualification will continue to have their qualification recognised within the Civil and Building Services Engineering Industry (Plumbing) in terms of meeting relevant career and further learning entry and/or progression requirements.

National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 2)
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NQF Level of qualification: 2

Total credits available: 79

Total credits required: 79

	Compulsory	Elective
level 1 credits available	14	-
level 2 credits available	65	-
minimum totals required	79	-

Registration date: 31 May 2018

Scheduled review date: 2023

Body responsible for the qualification: Namibia Training Authority (NTA) through the Mining and Quarrying, Construction, Electricity, Gas, Water Supply and Sanitation Industry Skills Committee (ISC).

Other bodies whose unit standards are included in the qualification: None

1 purpose

This qualification recognises people who have the competencies required for performing plumbing tasks. It is awarded to people who have demonstrated the skills and knowledge required to communicate effectively with others as part of plumbing operations, use and maintain power tools and machines as part of plumbing operations, apply basic welding techniques as part of plumbing operations, perform calculations related to plumbing operations, carry out basic levelling as part of plumbing operations, perform basic bricklaying and plastering and rendering tasks as part of plumbing operations, perform basic concreting as part of plumbing operations, carry out basic setting out as part of plumbing operations, read and interpret basic building drawings as part of plumbing operations, install and repair water mains pipe system, perform basic sheet metal work and soft soldering, set out and install water services. They further have a good understanding of applying knowledge of pre-basic mathematics in different contexts, apply knowledge of basic building science in different contexts and apply knowledge of basic building drawing in different contexts.

This qualification leads to the National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 3).

2 regulations for the qualification

2.1 summaries of qualification requirements

The entry requirement is the National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 1) or equivalent.

This qualification will be awarded to people who are credited with 79 credits and have met the requirements of the compulsory sections as well as all the requirements for Workplace Integrated Learning (WIL) as laid out in the National Policy on Work-Integrated Learning for Technical Vocational Education and Training (TVET).

2.2 detailed qualification requirements

Compulsory

All the unit standards listed below are required.

FIELD: Physical Planning and Construction
Subfield: Civil and Building Services Engineering
Domain: Plumbing

Unit No.	Unit Standard Title	Level	Credit
446	Communicate effectively with others as part of plumbing operations	2	2
447	Use and maintain power tools and machines as part of plumbing operations	2	4
1913	Apply basic welding techniques as part of plumbing operations	2	8
449	Perform calculations related to plumbing operations	2	2
450	Carry out basic levelling as part of plumbing operations	2	3
451	Perform basic bricklaying and plastering and rendering tasks as part of plumbing operations	2	5
452	Perform basic concreting as part of plumbing operations	2	4
453	Carry out basic setting out as part of plumbing operations	2	4
454	Read and interpret basic building drawings as part of plumbing operations	2	3
1914	Install and repair water main pipes system	2	6
1911	Perform basic sheet metal work and Soft soldering	1	14
458	Set out and install water services	2	6

AND

FIELD: Physical, Mathematical and Computer Studies
Subfield: Numeracy
Domain: Foundation Numeracy Skills

Unit No.	Unit Standard Title	Level	Credit
890	Apply knowledge of pre-basic mathematic in different context.	2	6

AND

FIELD: Physical, Planning and Construction
Subfield: Building Science and Drawing
Domain: Foundation Building Science and Drawing Skills

Unit ID	Unit Standard Title	Level	Credits
897	Apply knowledge of basic building science in different contexts	2	6
903	Apply knowledge of basic building drawing in different contexts	2	6

3 Credit recognition and transfer arrangements

Credits for any version of a unit standard of the same identification number will be recognised in the award of this qualification.

4 Special Arrangements

4.1 Providers seeking registration and/or accreditation to deliver this qualification must meet the following special arrangements.

4.1.1 This qualification will be offered to trainees either including a 6 months period of **industrial/job attachment**, or as an **apprenticeship scheme** of a duration determined and agreed upon by the employer and the training provider on a ratio of 70/30 (70% at workplace and 30% at Training institution) basis.

Industrial/job attachment is defined as a period in a workplace setting where a trainee obtains structured practical experience in a specific occupation in order to complement competencies acquired during training at a technical vocational training provider (TVTP).

Apprenticeship refers to the system of work integrated learning, where an apprentice is employed by a company on contractual basis, earning a monthly salary, learning and working side-by-side with an experienced mentor. In this case the employer must be an NTA approved entity (company) to register apprentices and has to identify a suitable training provider to provide the apprentice with the opportunity to gain skills and knowledge from theoretical training.

Employers and training providers are encouraged to consult the **National Policy On Work-Integrated Learning (WIL) for Technical and Vocational Education and Training (TVET) Sector** for further details on WIL implementation.

4.1.2 Providers involved in the assessment of this qualification and the associated unit standards must comply with the national assessment framework for the TVET system up to and including level 5 of the National Qualifications Framework. Assessment will include performance and achievement assessment acquired through work integrated learning periods.

Assessment arrangements apply to all occupations and industries which are encompassed in the technical vocational education and training sector.

4.1.3 Providers of this qualification and the associated unit standards must be registered and/or accredited.

4.1.4 Providers of this qualification and their associated unit standards must have access to all equipment and facilities detailed in the tools and equipment list of the relevant training program.

4.2 Competencies covered in this qualification may be assessed through Recognition of Prior Learning (RPL).

4.3 Further relevant information and documentation may be accessed through:

Namibia Training Authority

Rand Street

Khomasdal

Namibia

Telephone number: 061 207 8550

Facsimile number: 061 207 8551

5 Transition arrangements

5.1 Non National Qualifications Framework transition

None.

5.2 National Qualifications Framework transition

Version 2

This qualification was updated and issued as Version 2 in 2018.

Version 1 of this qualification will not be awarded as from 31 December 2020. People currently working towards Version 1 of this qualification are advised to transfer their existing credit awards to this version of the qualification at any time during 2019 and beyond.

People holding the earlier version of this qualification will continue to have their qualification recognised within the Civil and Building Services Engineering Industry (Plumbing) in terms of meeting relevant career and further learning entry and/or progression requirement.

National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 3)
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NQF Level of qualification: 3

Total credits available: 62

Total credits required: 62

	Compulsory	Elective
level 4 credits available	8	-
level 3 credits available	54	-
minimum totals required	62	-

Registration date: 31 May 2018

Scheduled review date: 2023

Body responsible for the qualification: Namibia Training Authority (NTA) through the Mining and Quarrying, Construction, Electricity, Gas, Water Supply and Sanitation Industry Skills Committee (ISC).

Other bodies whose unit standards are included in the qualification: None

1 purpose

This qualification recognises people who have the competencies required for performing advanced plumbing tasks. It is awarded to people who have demonstrated the skills and knowledge required to install basic gas supply system as part of plumbing operations, select and fit insulation and sheathing as part of plumbing installations, install storm water and sub-soil drainage systems as part of plumbing operations, install and repair below ground sanitary drainage systems as part of plumbing operations, fabricate and install flashings as part of plumbing operations, install gutters and down pipes, erect and dismantle scaffolding as part of plumbing operations, plan and install hot water supply systems as part of plumbing operations. They further have a good understanding of apply knowledge of basic mathematics in different context, apply knowledge fundamental building science in different context and apply fundamental knowledge of building drawing in different contexts.

This qualification leads to the National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 4).

2 regulations for the qualification

2.1 Summary of qualification requirements

The entry requirement is the National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 2) or equivalent.

This qualification will be awarded to people who are credited with 62 credits and have met the requirements of the compulsory sections as well as all the requirements for Workplace Integrated Learning (WIL) as laid out in the National Policy on Work-Integrated Learning for Technical Vocational Education and Training (TVET).

2.2 detailed qualification requirements

Compulsory

All the unit standards listed below are required.

FIELD: Physical Planning and Construction
 Subfield: Civil and Building Services Engineering
 Domain: Plumbing

Unit No.	Unit Standard Title	Level	Credit
1915	Install basic gas supply system as part of plumbing operations	3	6
461	Select and fit insulation and sheathing as part of plumbing installations	3	4
462	Install storm water and sub-soil drainage systems as part of plumbing operations	3	4
1916	Install and Repair below ground sanitary drainage systems as part of plumbing operations	3	8
464	Fabricate and install flashings as part of plumbing operations	3	4
466	Install gutters and down pipes	3	4
472	Erect and dismantle scaffolding as part of plumbing operations	3	6
501	Plan and install hot water supply systems as part of plumbing operations.	4	8

AND

FIELD: Physical, Mathematics and Computer Science
 Subfield: Numeracy
 Domain: Foundation Numeracy Skills

Unit ID	Unit Standard Title	Level	Credits
891	Apply knowledge of basic mathematics in different context	3	6

AND

FIELD: Physical, Planning and Construction
 Subfield: Building Science and Drawing
 Domain: Foundation Building Science and Drawing Skills

Unit ID	Unit Standard Title	Level	Credits
898	Apply knowledge fundamental building science in different context	3	6
904	Apply fundamental knowledge of building drawing in different contexts	3	6

3 Credit recognition and transfer arrangements

Credits for any version of a unit standard of the same identification number will be recognised in the award of this qualification.

4 Special Arrangements

4.1 Providers seeking registration and/or accreditation to deliver this qualification must meet the following special arrangements.

4.1.1 This qualification will be offered to trainees ***either*** including a 6 months period of **industrial/job attachment**, ***or*** as an **apprenticeship scheme** of a duration determined and agreed upon by the employer and the training provider on a ratio of 70/30 (70% at workplace and 30% at Training institution) basis.

Industrial/job attachment is defined as a period in a workplace setting where a trainee obtains structured practical experience in a specific occupation in order to complement competencies acquired during training at a technical vocational training provider (TVTP).

Apprenticeship refers to the system of work integrated learning, where an apprentice is employed by a company on contractual basis, earning a monthly salary, learning and working side-by-side with an experienced mentor. In this case the employer must be an NTA approved entity (company) to register apprentices and has to identify a suitable training provider to provide the apprentice with the opportunity to gain skills and knowledge from theoretical training.

Employers and training providers are encouraged to consult the **National Policy On Work-Integrated Learning (WIL) for Technical and Vocational Education and Training (TVET) Sector** for further details on WIL implementation.

4.1.2 Providers involved in the assessment of this qualification and the associated unit standards must comply with the national assessment framework for the TVET system up to and including level 5 of the National Qualifications Framework. Assessment will include performance and achievement assessment acquired through work integrated learning periods.

Assessment arrangements apply to all occupations and industries which are encompassed in the technical vocational education and training sector.

4.1.3 Providers of this qualification and the associated unit standards must be registered and/or accredited.

4.1.4 Providers of this qualification and their associated unit standards must have access to all equipment and facilities detailed in the tools and equipment list of the relevant training program.

4.2 Competencies covered in this qualification may be assessed through Recognition of Prior Learning (RPL).

4.3 Further relevant information and documentation may be accessed through:

Namibia Training Authority

Rand Street

Khomasdal

Namibia

Telephone number: 061 207 8550

Facsimile number: 061 207 8551

5 Transition arrangements

5.1 Non National Qualifications Framework transition

None.

5.2 National Qualifications Framework transition

Version 2

This qualification was updated and issued as Version 2 in 2018.

Version 1 of this qualification will not be awarded as from 31 December 2020. People currently working towards Version 1 of this qualification are advised to transfer their existing credit awards to this version of the qualification at any time during 2019 and beyond.

People holding the earlier version of this qualification will continue to have their qualification recognised within the Civil and Building Services Engineering Industry (Plumbing) in terms of meeting relevant career and further learning entry and/or progression requirements.

National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 4)
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NQF Level of qualification: 4

Total credits available: 85

Total credits required: 85

	Compulsory	Elective
level 4 credits available	81	-
level 3 credits available	4	-
minimum totals required	85	-

Registration date: 31 May 2018

Scheduled review date: 2023

Body responsible for the qualification: Namibia Training Authority (NTA) through the Mining and Quarrying, Construction, Electricity, Gas, Water Supply and Sanitation Industry Skills Committee (ISC).

Other bodies whose unit standards are included in the qualification: None

1 purpose

This qualification recognises people who have the competencies required for performing specialized plumbing tasks. It is awarded to people who have demonstrated the skills and knowledge required to plan and install water firefighting system, plan, install and commission domestic pumps, plan, install and remove trench support as part of plumbing operations, plan and prepare quotations, complete tender documents for plumbing projects and products, connect and test irrigation system as part of plumbing operations, plan and install on-site domestic effluent treatment plants, develop innovative ideas for the plumbing workplace. They further have a better understanding for applying knowledge of intermediate mathematics in different context, apply advanced knowledge of building science in different context, apply knowledge of advanced building drawing in different context, establish a business as part of entrepreneurship operations, implement, control and monitor business operations

2 regulations for the qualification

2.1 Summary of qualification requirements

The entry requirement is the National Vocational Certificate in Civil and Building Services Engineering (Plumbing) (Level 3) or equivalent.

This qualification will be awarded to people who are credited with 85 credits and have met the requirements of the compulsory sections as well as all the requirements for Workplace Integrated Learning (WIL) as laid out in the National Policy on Work-Integrated Learning for Technical Vocational Education and Training (TVET).

2.2 detailed qualification requirements

Compulsory

All the unit standards listed below are required.

FIELD: Physical Planning and Construction
Subfield: Civil and Building Services Engineering
Domain: Plumbing

Unit No.	Unit Standard Title	Level	Credit
459	Plan and install water fire fighting system	4	6
1917	Plan, install and commission domestic pumps	4	6
469	Plan, install and remove trench support as part of plumbing operations	4	4
1918	Plan and prepare quotations, complete tender documents for plumbing projects and products	4	4
1919	Connect and test irrigation systems as part of plumbing operations	4	8
473	Plan and install on-site domestic effluent treatment plants	4	8
500	Develop innovative ideas for the plumbing workplace	3	4

AND

FIELD: Physical, Mathematics and Computer Science
Subfield: Numeracy
Domain: Foundation Numeracy Skills

Unit ID	Unit Standard Title	Level	Credits
892	Apply knowledge of intermediate mathematics in different context	4	6

AND

FIELD: Physical, Planning and Construction
Subfield: Building Science and Drawing
Domain: Foundation Building Science and Drawing Skills

Unit ID	Unit Standard Title	Level	Credits
899	Apply advanced knowledge of building science in different context	4	6
905	Apply knowledge of advanced building drawing in different context	4	6

AND

FIELD: Financial and Business Services
Subfield: Business Development
Domain: Entrepreneurship

Unit No.	Unit Standard Title	Level	Credit
735	Establish a business as part of entrepreneurship operations	4	12
736	Implement, control and monitor business operations	4	15

3 Credit recognition and transfer arrangements

Credits for any version of a unit standard of the same identification number will be recognised in the award of this qualification.

4 Special Arrangements

4.1 Providers seeking registration and/or accreditation to deliver this qualification must meet the following special arrangements.

4.1.1 This qualification will be offered to trainees either including a 6 months period of **industrial/job attachment**, or as an **apprenticeship scheme** of a duration determined and agreed upon by the employer and the training provider on a ratio of 70/30 (70% at workplace and 30% at Training institution) basis.

Industrial/job attachment is defined as a period in a workplace setting where a trainee obtains structured practical experience in a specific occupation in order to complement competencies acquired during training at a technical vocational training provider (TVTP).

Apprenticeship refers to the system of work integrated learning, where an apprentice is employed by a company on contractual basis, earning a monthly salary, learning and working side-by-side with an experienced mentor. In this case the employer must be an NTA approved entity (company) to register apprentices and has to identify a suitable training provider to provide the apprentice with the opportunity to gain skills and knowledge from theoretical training.

Employers and training providers are encouraged to consult the **National Policy On Work-Integrated Learning (WIL) for Technical and Vocational Education and Training (TVET) Sector** for further details on WIL implementation.

4.1.2 Providers involved in the assessment of this qualification and the associated unit standards must comply with the national assessment framework for the TVET system up to and including level 5 of the National Qualifications Framework. Assessment will include performance and achievement assessment acquired through work integrated learning periods.

Assessment arrangements apply to all occupations and industries which are encompassed in the technical vocational education and training sector.

4.1.3 Providers of this qualification and the associated unit standards must be registered and/or accredited.

4.1.4 Providers of this qualification and their associated unit standards must have access to all equipment and facilities detailed in the tools and equipment list of the relevant training program.

4.2 Competencies covered in this qualification may be assessed through Recognition of Prior Learning (RPL).

4.3 Further relevant information and documentation may be accessed through:

Namibia Training Authority

Rand Street

Khomasdal

Namibia

Telephone number: 061 207 8550

Facsimile number: 061 207 8551

5 Transition arrangements

5.1 Non National Qualifications Framework transition

None.

5.2 National Qualifications Framework transition

Version 2

This qualification was updated and issued as Version 2 in 2018.

Version 1 of this qualification will not be awarded as from 31 December 2020. People currently working towards Version 1 of this qualification are advised to transfer their existing credit awards to this version of the qualification at any time during 2019 and beyond.

People holding the earlier version of this qualification will continue to have their qualification recognised within the Civil and Building Services Engineering Industry (Plumbing) in terms of meeting relevant career and further learning entry and/or progression requirements.