basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Curriculum and Assessment Policy Statement: Technical Occupational

Year 1 - 4

CIVIL TECHNOLOGY:

MAINTENANCE

CONTENT

SECTION 1:

INTRODUCTION TO THE CURRICULUM AND ASSESSMENT POLICY STATEMENT: TECHNICAL OCCUPATIONAL

1.1 Background

The South African Constitution, Act 108 of 1996, enshrines the right of every child to access quality basic education without there being any form of discrimination. There are learners participating in the General Education and Training Band who have an interest and talent in applied knowledge and in technical and vocational skills subjects which are currently not available in the National Curriculum Statement, Grades R to 12 (2011). This cohort of learners should be given an opportunity to achieve a formal qualification or recognition of achievement towards a qualification that is related to any vocational and occupational learning within their area of interest and aptitude.

This Subject Statement has been developed to respond more effectively to the needs of these learners who have been identified and assessed through the protocols approved by the Department of Basic Education and who will benefit from curriculum content that is aligned to the Senior Phase of the National Curriculum Statement at a more applied and functional level in accordance with their interest and aptitude.

It is critical, that through differentiated methodologies, the learners enrolled for this qualification will be able to progress with regard to applied competencies, even where they might not be able to attain the minimum theoretical requirements of the respective grades of the senior phase. There should always be high expectations for all learners and the necessary scaffolding and learning support to master foundational competencies (language and numeracy) relevant to the specific subject, so that they are in a position to demonstrate the practical competencies that they have mastered which will make it possible for them to progress to further education and training pathways.

The learning programme will be structured in such a way that it would adequately prepare learners to progress onto the academic, technical vocational or technical occupational pathways of the Further Education and Training Band, albeit with endorsement. It will also enable learners across the range of competencies and aptitudes to obtain a recognised and accredited qualification or certificate of attainment.

The programme aims at contributing to the ideal of education to produce learners who will function **meaningfully** and **effectively** in the society, be able to enter future **careers** and be equipped to meet the requirements of the **economy** (local and global).

1.2 Overview

Through the policy document the Minister of Basic Education will be able to prescribe the minimum norms and standards for technical occupational education in the General Education and Training band.

The following legal framework will be adhered to:

(i) National Curriculum Statement, Grades R to 12 (2011) together with the National Protocol for Assessment and the National Policy pertaining to the Programme and Promotion Requirements of the National Curriculum Statement, Grades R to 12;

(ii) Draft Technical Vocational Subject Statements listed in the Draft General Certificate of Education: Technical Occupational, a Qualification at Level 1 on the National Qualification Framework;

(iii) General and Further Education and Training Quality Assurance Act, 2001 (Act No.58 of 2001); the General and Further Education and Training Amendment Act, 2008 (Act No 50 of 2008); the NQF Act, 2008 (Act no 67 of 2008) and the Continuing Education and Training Act, 2006 as amended by Act No 3 of 2012 and Act No 1 of 2013;

(iv) The General and Further Education and Training Qualifications Sub- Framework (August 2013);

(v) Standards and quality assurance for General and Further Education and Training (June 2008, Revised April 2013);

(vi) Policy and regulations pertaining to the conduct, administration and management of assessment for the General Education and Training Certificate in Skills and Vocational Training: A qualification at Level 1 on the National Qualification Framework (NQF);

(vii) Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001);

(viii) The United Nations Convention on the Rights of Persons with Disabilities adopted by the United Nations General Assembly on 13 December 2006 and ratified by the South African parliament on 5 June 2007;

(ix) The White Paper on the Rights of Persons with Disabilities, 2015;

(x) Section 11 of the Children's Act (2007);

(xi) Chapter 5, section 76 of the Children's Act as amended (2007);

(xii) Umalusi's Quality Assurance of Assessment: Directives, Guidelines and Requirements;

(xiii) Skills Development Act, 1998 (Act 97 of 1998); and

(xiv) Assessment Policy for Qualifications and Part Qualifications on the Occupational Qualifications Sub-Framework (OQSF), 2014 of the QCTO.

1.3. General Aims of the Technical Occupational Curriculum

(a) The National Curriculum Statement, Grades R to 9 gives expression to the knowledge, skills and values worth learning in South African schools. The Technical Occupational Curriculum aims to ensure that learners, irrespective of their abilities, have the opportunity to develop competences for meeting challenges and taking up opportunities in the fast changing 21st century and are also guided to apply knowledge and skills in ways that are meaningful to their own lives. In this regard, the curriculum promotes knowledge in local contexts, while being sensitive to global imperatives, including the demands of the fourth industrial revolution. Sustaining development-relevance in the face of constant and rapid change requires curricula to be lifelong learning systems in their own right, capable of constant self-renewal and innovation.

(b) The curriculum serves the purposes of:

- Equipping learners, irrespective of their socio-economic background, race, gender, physical ability or intellectual ability, with the knowledge, skills and values necessary for self-fulfilment, and meaningful participation in society as citizens of a free country;
- Promoting critical thinking, creativity and innovation, communication, collaboration, information, media and ICT literacies, flexibility and adaptability, initiative and self-direction, social and cross-cultural, productivity and accountability, leadership and responsibility and life-long learning;
- Facilitating the transition of learners from education institutions to the workplace;

- Providing employers with a sufficient profile of a learner's competences.
- Being sensitive to issues of diversity such as poverty, inequality, race, gender, language, age, and other factors;
- Valuing indigenous knowledge systems: acknowledging the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution; and
- Credibility, quality and efficiency: providing an education that is comparable in quality, breadth and depth to those of other countries.

(c) The curriculum is based on the following principles:

- Social transformation: ensuring that the educational imbalances of the past are redressed, and that equal educational opportunities are provided for all sections of the population;
- Active and critical learning: encouraging an active and critical approach to learning, rather than rote and uncritical learning of given truths;
- High knowledge and high skills: the minimum standards of knowledge and skills to be achieved at each grade are specified and set high, achievable standards in all subjects;
- Progression: content and context of each grade shows progression from simple to complex; and
- Human rights, inclusivity, environmental, gender and social justice and equality: infusing the principles and practices of social justice and human rights as defined in the Constitution of the Republic of South Africa as well as the greening of the economy.

(d) Inclusivity should become a central part of the organisation, planning and teaching at each school. This can only happen if all teachers have a sound understanding of how to recognise and address barriers to learning, and how to plan for diversity. The key to managing inclusivity is ensuring that barriers are identified and addressed by all the relevant support structures within the school community, including teachers, District-Based Support Teams, School-based Support Teams, parents and Special Schools as Resource Centres. To address barriers in the classroom, teachers should use various curriculum differentiation strategies such as those included in the Department of Basic Education's Guidelines for Responding to Learner Diversity in the Classroom (2011), as well as the Standard Operating Procedures for Accommodations in Assessment (2016).

1.3.1. The aims of the General Certificate of Education: Technical Occupational

The specific aims of the qualification are to:

- Give recognition to learners who would meet the requirements and achieve the competencies as specified in the Exit Level Outcomes and associated Assessment Criteria as set out in the GFETQSF along differentiated pathways;
- Provide a foundation of quality, standardised general education which will suit the needs of these learners and help prepare them for life after school and enable them to access particular employment or occupational workplace-based learning. It may also enable the learners to access a vocational qualification at a Technical and Vocational Education Training College;
- Promote Lifelong learning to enable learners to continue with further learning and skills development in the workplace;
- Prepare learners to function better in a fully inclusive society and workplace; and
- Provide employers with a profile of the learner's competence.

Learners successfully completing the qualification will be able to:

- Identify, select, understand and apply knowledge to the intended purpose and identify solutions to problems in the field of study;
- Demonstrate the necessary applied knowledge and skills identified for competence in a subject, as specified in the subject statement;
- Demonstrate knowledge and skills gained for purpose of formal communication and basic numerical operations;
- Have the ability to apply knowledge and skills in changing contexts;
- Reflect on their learning in order to promote an interest in learning and further study; and
- Demonstrate basic entrepreneurial skills that will enable them to create their own work and business opportunities in the contexts in which they live.

1.4. Subjects and Time Allocation

Instructional Time for the Technical Occupational Learning Programmes is 27½ hours in a five-day cycle

<table>
<tr><th colspan="3">Subjects

General Education</th><th colspan="2">Time</th></tr>
<tr><td colspan="3" rowspan="2">Languages
(Home Language and First Additional Language)

All 11 official languages (Afrikaans, English, isiNdebele, isiXhosa, isiZulu, Siswati, Sesotho, Setswana, Sepedi, Tshivenda, Xitsonga)</td><td colspan="2">3 Hours for Home Language</td></tr>
<tr><td colspan="2">2 hours for First Additional Language</td></tr>
<tr><td colspan="3">Mathematics</td><td colspan="2">3 hours</td></tr>
<tr><td rowspan="4">Life Skills</td><td>Personal and Social Well-being
(including aspects of Life Orientation, Social Sciences and Economic and Management Sciences)</td><td>2½ hours</td><td rowspan="4">6 hours</td></tr>
<tr><td>Physical Education</td><td>1 hour</td></tr>
<tr><td>Creative Arts</td><td>1 hour</td></tr>
<tr><td>Natural Sciences</td><td>1½ hours from year 2 onwards
This time to be used in year 1 to support Languages and Mathematics</td></tr>
<tr><td colspan="5">Information Communication Technology
ICT is a compulsory subject for all learners. It can be offered either as a stand-alone or integrated across various subjects. If offered as a stand-alone a school may use time allocated to the Technical Occupational programme. ICT does not count towards the qualification but is a necessary life-long skill. ICT is not to be confused with the Technical Occupational Subject “Office Administration” which is an elective.</td></tr>
</table>

Subjects **Technical Occupational: Electives**	**Time**
Agricultural Studies Art and Crafts Civil Technology: Bricklaying and Plastering Civil Technology: Plumbing Civil Technology: Woodworking and Timber Consumer Studies: Food Production Consumer Studies: Sewing Early Childhood Development Electrical Technology: Electrical Hospitality Studies Mechanical Technology: Body Works: Panel Beating and or Spray Painting Mechanical Technology: Motor Mechanics Mechanical Technology: Sheet Metal Work Mechanical Technology: Welding Mechanical Technology: Maintenance Office Administration Personal Care: Ancillary Health Care Personal Care: Beauty and Nail Technology Personal Care: Hairdressing Service Technology: Upholstery Wholesale and Retail	13½ hours
Total: General and Occupational	27½

The table below proposes the learner progression across the years at a School of Skills.

Year 1 Minimum of 1 year of orientation	**Year 2**	**Year 3**	**Year 4**
Base Line Assessment for Language and Mathematics ➢ **Intervention (ISP)** **General Education:** • **Home Language** • **FAL** • **Mathematics** • **Life Skills:** ✓ Personal Social Wellbeing ✓ Physical Education ✓ Creative Arts ➢ ICT Enrichment **Technical Occupational** **Minimum 2 x SKILLS** **Across the year** **Post Assessment** • **Analyse results** Progress to Year 2 with appropriate support for Languages and Mathematics	**General Education:** • **Home Language** • **FAL** • **Mathematics** • **Life Skills:** ✓ Personal Social Wellbeing ✓ Physical Education ✓ Creative Arts ✓ Natural Sciences ➢ ICT Enrichment **Technical Occupational** **Minimum of 1 Skill**	**General Education:** • **Home Language** • **FAL** • **Mathematics** • **Life Skills:** ✓ Personal Social Wellbeing ✓ Physical Education ✓ Creative Arts ✓ Natural Sciences ➢ ICT Enrichment **Technical Occupational** **Minimum of 1 Skill**	**General Education:** • **Home Language** • **FAL** • **Mathematics** • **Life Skills:** ✓ Personal Social Wellbeing ✓ Physical Education ✓ Creative Arts ✓ Natural Sciences ➢ ICT Enrichment **Technical Occupational** **Minimum of 1 Skill** GCE: TO Qualification Or Certificate of Achievement (External exam- results verified / moderated)

Note:

Year One is an orientation year and learners must be exposed to a minimum of two occupational skills so that they can select a skill with which they will continue from Year Two. Schools that offer more than the minimum two skills in Year One may adapt the Annual Teaching Plan for Year One to accommodate their rotation system to expose learners to more skills e.g. schools may offer a skill per term for Terms 1, 2 and 3 and learners then select the skill they will specialise in and start it in Term 4. It is important that learners in Year One experience the core competencies of the skills so that an informed choice can be made.

Years Two, Three and Four are the critical years for learners. It is important that learners are exposed to all the Topics and Specific Aims per selected Occupational skill, acknowledging that not all learners will be successful in all of these.

SECTION 2:

INTRODUCTION TO CIVIL TECHNOLOGY: MAINTENANCE

2.1 What is Maintenance?

Maintenance as a subject covers the skills and knowledge required to perform elementary repair and maintenance work at a basic level focusing on the household and small construction environments. Maintenance skills are used by handymen who prevent equipment from breaking down and materials from deteriorating to solve minor problems before they become more serious ones. Handymen keep records of repairs undertaken and the dates when equipment was last repaired, inspected or serviced. This helps them to establish an inspection and repair schedule.

2.2 Topics to be studied in Maintenance:

Topics	Sub Topics
1. **Metal- work**	Safety
	Measuring and marking
	Filing and grinding
	Cutting
	Drilling
	Soldering, welding and fastening
2. **Mechanical Maintenance**	Safety
	Service of vehicle
	Tyre maintenance
	Battery maintenance
	Basic maintenance of vehicles
	Basic maintenance on mechanical devices
3. **Plumbing**	Safety
	Tools & equipment
	Materials
	Measuring and marking

	Fitment of pipes and installations
	Maintenance of pipes, valves, cisterns, geysers,
4. **Painting and Water-proofing**	Safety
	Paints/material
	Tools and equipment
	Mixing of paints
5. Glazing	Glass, Safety and Types
	Cutting
6. **Electrical**	Safety
	Electrical, tools and material
	Maintenance of electrical components
7. **Woodworking**	Safety
	Measuring and marking
	Cutting and finishing
	Tools and materials
	Maintenance and repairs
8. **Bricklaying and Plastering**	Safety
	Tools &equipment
	Mixtures of mortar
	Repairs & maintenance of walls
9. **Flooring and Tiling**	Safety
	Tools &equipment
	Adhesives
	Measuring
	Preparation-surfaces
	Grouting and cleaning

2.3 Specific Aims:

The learner is able to:

1. Know and apply basic skills to solve metal work problems
2. Maintain basic mechanical devices
3. Maintain plumbing installations
4. Apply basic painting and water-proofing skills used in the building and construction industry
5. Apply basic glazing skills used in the building and construction industry
6. Maintain electrical appliances
7. Apply basic woodworking skills used in the building and construction industry
8. Apply basic bricklaying and plastering skills used in the building and construction industry
9. Apply basic flooring and tiling skills used in the building and construction industry.

2.4 Requirements for Maintenance as a subject

2.4.1 Time Allocation

The total number of hours allocated for the subject in a five-day cycle is 13 ½ hours. Sufficient time must be allocated in the school timetable for the practical work required.

2.4.2 Resources

Human resources

Maintenance requires a trained subject specialist. It is preferred that the teacher offering Maintenance is an artisan / technician / technical teacher in a Maintenance related area. Industry related experience and workshop management skills are essential and a tertiary qualification in technical teaching is preferred.

Maintenance teachers are required to:

- Know and understand South African Standards (SANS)
- Teach the subject content with confidence and flair
- Interact with learners in a relaxed but firm manner
- Manage the workshop resourcing, budget and safety
- Manage the teaching environment

- Conduct stock taking and inventory
- Plan for practical work
- Plan for theory lessons
- Conduct weekly practical sessions
- Maintain and service the workshop as a whole
- Maintain and service the tools and instruments
- Ensure learner safety
- Produce working PAT projects in cooperation with learners
- Carry out School Based Assessment (SBA)
- Implement innovative methods to keep the subject interesting
- Be self-motivated to keep her/him abreast of the latest technological developments
- Regularly attend skills workshops.

Learner Resources:

- Text/ resource book
- Suitable protective clothing

2.4.3 Infrastructure, equipment and finances

Schools must ensure that teachers have the necessary infra-structure, equipment and financial resources for quality teaching and learning.

Infrastructure

- Maintenance cannot be implemented in a school without an equipped workshop.
- Electricity supply to the workshop is crucial, preferably a three phase, four-wire supply, but at least single phase with a high current circuit breaker.
- Lighting and ventilation is of extreme importance and a workshop should ideally have multiple exits with doors that open outward.
- Tools and equipment should have sufficient storage and well developed storage management system with an up to date inventory. Shelves should be clearly marked and storage areas defined.
- Good housekeeping principles require that all workshops be cleaned regularly. A suitable waste removal system should be in place to accommodate refuse, off-cut materials as well as chemical waste. The requirements of the Occupational Health and Safety (OHS) Act 85 of 1993 need to be complied with at all times.
- Ladder safety and different ladder types plus scaffolding.

- Machinery on stands should be permanently affixed to the floor, with isolation switches for the mains supply. All machines should have working machine guards.
- Electrical motors should ideally be painted bright orange. Specification plates should be clearly legible.
- The workshop must have a lockable mains distribution board. The workshop must be fitted with an emergency cut of switch/s which is/are easily accessible at all times. The red, mushroom type, emergency switch should preferably be lockable to prevent accidental re-connection with mains in the case of it being activated.
- Safety rules must be displayed on posters in the workshop.

Equipment

The following is the minimum requirement for a Maintenance workshop.

- **Metal-works** -

Non- Consumable	Hand tools: steel rule, measuring tape, square, scriber, punch, hammer ball pein 2lb, 4lb, hacksaw, snips, side-cutter, pliers, bench vice, pop riveter, files, welding vice grips, vice grips, Electrical tools and equipment: angle grinder, electric drill, soldering iron, cut off saw, welding equipment –gas, arc, mig, safety glasses, welding helmets, safety gloves, bench grinder, drill press
Consumable	Sheet-metal, round bar, angle iron, and square bar and tubing, drill bits, mutton cloth, hand cleaner, welding rods, flux, welding wire.

- **Mechanical maintenance** -

Non- Consumable	Hand tools: spanners and mechanical tools, jack, trolley jack, creeper, hammers, screwdrivers, filter straps, plug spanners, lead lights, multi-meters, timing light, torque wrench, gloves, goggles. Electrical tools and equipment: grinders, battery-charger and tester

Consumable	Mutton cloth, hand cleaner, grease, filters (oil, fuel, air.) gearbox oil, diff oil, engine oil.

- **Plumbing–**

Non- Consumable	Hand tools: shifting, stilton wrench, gas gun, under basin spanner, tin snips, tap reseating tool, vice grips, spirit levels, hack saw, water pump pliers, masonry drill bits, measuring tape. Electrical tools and equipment: Impact drill, angle grinder.
Consumable	Various pipes and fittings

- **Electrical**–

Non- Consumable	Hand tools: testers, wire strippers, pliers, side cutters, screwdrivers Electrical tools and equipment: soldering equipment
Consumable	Electrical wire, fuses, solders, insulation tape.

- **Painting, and Water-proofing**–

Non- Consumable	Hand tools: brushes, roller, trays, hot-air gun, scrapers, paint-scrapers Electrical tools and equipment: paint-strippers
Consumable	Paints, water-proofing material, thinners, turpentine, cleaning material.

- **Glazing**–

Non- Consumable	Hand tools: glazing tools, glass cutters, measuring tapes, different glass types, putty, safety gloves Electrical tools and equipment
Consumable	Glass, window putty, cleaning material

- **Woodwork**–

Non- Consumable	Hand tools: Chisel, measuring tape, spirit levels, screwdrivers, hammers, saws, square, drill bits Electrical tools and equipment: Electric-planer and sander, jigsaw, small electrical drill, cordless drill.
Consumable	Timber screws, nails, wood protective vanish and wood glue

- **Building and plastering**–

Non- Consumable	Hand tools: concrete mixer, spades, spirit levels, trowel, chalk-line, plaster trowel, corner blocks Electrical tools and equipment: drill, grinder
Consumable	Cement, sand, stone, bricks (different sizes)

- **Flooring and Tiling**–

Non- Consumable	Hand tools, cutting tools, tile cutter, tile fitting tools Electrical tools and equipment: angle grinder
Consumable	Carpet, tiles, tile adhesive, grout

Finances:

Budget and inventory

This subject should only be given from skill centres that have the trades in question it will not be a financially viable to start a maintenance centre from scratch, the learner must move through all the different trades to acquire the knowledge.

A budget must be allocated for the subject. The amount will be determined by the number of learners taking the subject across all the years and the nature of the practical work required as stipulated in the curriculum. The budget needs to be revised annually and must consider all resources needed per year. The funding must make provision for maintenance of equipment and the replacement over the years.

Resourcing could be sub divided into the following categories:

- Safety Equipment
- Tools and Equipment
- Consumable Materials
- Practical Assessment Task Resources (PAT
- Teaching and Learning Support Material
- Maintenance

A stock inventory must be maintained by the teacher and verified annually by a Senior Management Team member.

2.5 Career opportunities

Career and occupational opportunities for learners with a foundation in **Maintenance** include but is not limited to:

- General handyman
- Maintenance manager/assistant
- Buildings manager
- Self-employment.

Handymen work in various settings. They can be employed in hospitals, colleges, offices, apartment buildings, factories, schools, stores and malls. In small establishments where they are responsible for all types of maintenance,

SECTION 3:

OVERVIEW OF TOPICS PER TERM AND ANNUAL TEACHING PLANS

3.1 Content overview

1. METALWORK

TOPIC	Year 1	Year 2	Year 3	Year 4
Safety	OHS act, personal, Workshop, tools, machinery and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery and materials safety General housekeeping in workshops	OHS act, personal, workshop, tools machinery and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools machinery, and materials safety General housekeeping in workshops
Measuring and Marking	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools. Conversion of measurement	Application, use and safety of basic hand tools. Calculations of simple surface area and linear measurements
Cutting	Identification, use and safety of basic hand- cutting tools	Identification and use and safety of basic hand-cutting tools and materials	Identification and use and safety of basic hand-cutting tools, equipment and machinery	Application, use and safety of heavy-duty cutting machinery and equipment
Drilling	Identification, use and safety of	Identification of drills, bits and	Identification of drills, bits and	Application of skills. Use of bits in

	drills, bits and use of equipment on sheet-metal	use and safety of equipment on sheet-metal	use and safety of equipment on mild steel, square and round bar and tubes	relation to different types of material
Soldering, welding and fastening	Identification, use and safety of soldering equipment and materials	Identification and use and safety of soldering equipment and materials	Identification, use and safety of welding and fastening equipment	Application of welding, soldering techniques and fastening Skills application

2. MECHANICAL MAINTENANCE

TOPIC	Year 1	Year 2	Year 3	Year 4
Safety	OHS act, personal, Workshop, tools, machinery and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops
Service of vehicle	Identification, use and safety of tools	Identification, use and safety of tools, and materials	Identification, use and safety of service materials/parts and equipment	Application, use and safety of service materials/parts and equipment
Tyre maintenance	Identification, use and safety of tools	Identification, use and safety of tools, and materials.	Identification, use and safety of tyre changing, balancing, equipment, and knowledge of	Application, use and safety of tyre changing and balancing equipment, and knowledge of

			puncture repairs	puncture repairs
Battery maintenance		Identification safety and knowledge of batteries	Identification safety and knowledge of batteries, Testing and re-charging of batteries	Application of safety and knowledge of batteries. Testing and re-charging of batteries
Basic maintenance of vehicles	Care and maintenance of interior and exterior of vehicle	Care and maintenance of interior and exterior of vehicle	Care and maintenance of interior and exterior of vehicle. Compound and polishing of exterior	Care and maintenance of interior and exterior of vehicle Compound and polishing of vehicle
Basic maintenance on mechanical devices	Identification, safety and use of basic tools	Identification, safety and use of basic tools	Identification, safety and use of basic tools, knowledge of repair materials and equipment	Application, safety and use of basic tools, knowledge of repair materials and equipment

3. PLUMBING

`TOPIC	**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**
Safety	OHS act, personal, ladder safety Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, ladder safety Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, ladder safety Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, ladder safety Workshop, tools, machinery, and materials safety General housekeeping in workshops

Tools& equipment	Identification, use and safety of basic hand tools, ladders.	Identification, use and safety of basic hand tools ladders	Identification, use and safety of basic hand tools and plumbing equipment and machinery ladders	Identification, use and safety of basic hand tools and plumbing equipment and machinery ladders
Materials	Knowledge of plumbing materials	Knowledge, care and use of plumbing materials	Knowledge, care, use and application of materials	Knowledge, care, use, application and costing of materials
Measuring and marking	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools and knowledge of units of measure	Identification, use and safety of basic hand tools and knowledge of units of measurements
Fitment of pipes	Identification and Knowledge of different types of pipes	Identification and Knowledge of different types of pipes	Identification and Knowledge of different types of pipes and fitment of pipes	Application of Knowledge in joining different types of pipes and fitment of pipes
Maintenance of pipes		Methods of repairing pipes	Repairing and maintaining different types of pipes	Repairing and maintaining different types of pipes
Unblocking of drains		Methods of unblocking of drains, knowledge of materials that block drains	Methods of unblocking of drains, knowledge of materials that block drains	Methods of unblocking of drains knowledge of materials that block drains, and unblocking of drains
Installations		Knowledge of different plumbing	Knowledge of different plumbing	Knowledge of different plumbing

		Fittings	fittings and installation of different pipes	fittings and installation of different pipes

4. PAINTING AND WATER-PROOFING

TOPIC	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Safety	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladders safety	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety
Paints and materials, mixing and application	Knowledge of different paints and materials	Knowledge of different paints and materials	Knowledge of different paints and materials. Application, mixing and methodology of painting	Knowledge of different paints and materials Application, mixing and methodology of painting
Tools and equipment	Identification, use, safety and knowledge of painting tools and equipment	Identification, use, safety and knowledge of painting tools and equipment	Identification, use, safety knowledge and maintenance of painting tools and equipment	Application, use, safety, knowledge and maintenance of painting tools and equipment
Water-proofing		Knowledge of materials	Knowledge of materials and use	Knowledge of materials and use

			and safety of tools.	and safety of tools. Repair and solve related problems.

5. GLAZING

TOPIC	Year 1	Year 2	Year 3	Year 4
Glass- types, safety and cutting	Knowledge and safety of glass.	Knowledge, safety and types of glass. Identification, knowledge and safety of glazing tools	Knowledge, safety and types of glass. Identification, knowledge and safety of glazing tools Use of glazing tools. Methods of glazing	Knowledge, safety and types of glass. Identification, knowledge and safety of glazing tools. Use of glazing tools and methods of glazing. Installation of glass

6. ELECTRICAL

TOPIC	Year 1	Year 2	Year 3	Year 4
Safety	OHS act, personal, Workshop, tools, machinery, and	OHS act, personal, Workshop, tools, machinery, and	OHS act, personal, Workshop, tools, machinery, and	OHS act, personal, Workshop, tools, machinery, and

	materials safety General housekeeping in workshops, ladder safety	materials safety General housekeeping in workshops, ladder safety	materials safety General housekeeping in workshops, ladder safety	materials safety General housekeeping in workshops, ladder safety
Electrical tools and material	Identification, use, knowledge and safety of electrical tools	Identification, use, knowledge and safety of electrical tools and material	Identification, use, knowledge and safety of electrical tools and material	Identification, use, knowledge and safety of electrical tools and material
Maintenance of electrical components	Identification, knowledge and safety of electric devices: plugs light fittings	Identification, knowledge and safety of electric devices: plugs light fittings, and knowledge of wiring- colour codes. Knowledge of AC and DC	Identification, knowledge and safety of electric devices: plugs light fittings and knowledge of wiring- colour codes. Repair and replace plugs and bulbs	Application of skills and knowledge and safety of electric devices: plugs, light fittings and knowledge of wiring- colour codes. Repair and replace plugs switches and bulbs. Knowledge of connecters of trailer plugs

7. WOODWORKING

TOPIC	Year 1	Year 2	Year 3	Year 4
Safety	OHS act, personal, Workshop, tools, machinery, and	OHS act, personal, Workshop, tools, machinery, and	OHS act, personal, Workshop, tools, machinery, and	OHS act, personal, Workshop, tools, machinery, and

	materials safety General housekeeping in workshops	materials safety General housekeeping in workshops	materials safety General housekeeping in workshops	materials safety General housekeeping in workshops
Measuring & marking	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools and conversion of measurements	Application, use and safety of basic hand tools and conversion of measurements
Cutting and finishing	Identification, knowledge, safety and use of basic cutting tools.	Identification, knowledge, safety and use of basic cutting tools. Methods of cutting.	Identification, knowledge, safety and use of basic cutting tools, machinery and equipment. Methods of cutting. Knowledge of finishes and finishing	Skills application, knowledge, safety and use of basic cutting tools, machinery and equipment. Methods of cutting. Knowledge of finishes and finishing.
Tools and materials	Identification, knowledge, use and safety of basic woodwork tools.	Identification, knowledge, maintenance, use and safety of basic woodwork tools and electrical equipment. Knowledge of materials and uses	Identification, knowledge, maintenance, use and safety of basic woodwork tools and electrical equipment. Knowledge of materials and uses.	Identification, knowledge, maintenance, use and safety of basic woodwork hand tools and electrical equipment. Knowledge of materials and uses.
Maintenance, repairs and installations		Identification, knowledge, use and safety of basic repair tools.	Identification, knowledge, use and safety of basic repair tools. Repair and replace wooden doors, windows,	Skills application, knowledge, use and safety of basic repair tools. Repair and replace wooden doors, windows. Repair and replace cupboards

8. BRICKLAYING AND PLASTERING

TOPIC	Year 1	Year 2	Year 3	Year 4
Safety	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety, scaffolding	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety, scaffolding	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety, scaffolding	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops, ladder safety, scaffolding
Tools and equipment	Identification, use and safety of basic building tools	Identification, use and safety of basic building tools	Identification, use and safety of basic building tools, equipment and machinery	Identification, use and safety of basic building tools, equipment and machinery
Repairs and maintenance of walls.	x	Preparation of surfaces for repair and maintenance of walls. Knowledge and use of building material.	Preparation of surfaces for repair and maintenance of walls. Knowledge and use of building material. Repair and maintain cracked and damaged walls.	Preparation of surfaces for repair and maintenance of walls. Knowledge and use of building material. Repair and maintain cracked and damaged walls. Construction of a single brick wall.

9. FLOORING AND TILING

TOPIC	Year 1	Year 2	Year 3	Year 4
Safety	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops	OHS act, personal, Workshop, tools, machinery, and materials safety General housekeeping in workshops
Tools and equipment	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools	Identification, use and safety of basic hand tools, equipment and machinery	Skills application, use and safety of basic hand tools, equipment and machinery
Adhesives	Knowledge and use of different adhesives and material	Knowledge and use of different adhesives and material	Knowledge and use of different adhesives and material	Knowledge and use of different adhesives and material. Mixture of adhesives. Application of adhesives
Measuring	Identification. Knowledge, use and safety of basic tools	Identification. Knowledge, use and safety of basic tools	Identification. Knowledge, use and safety of basic tools and equipment	Identification. Knowledge, use and safety of basic tools. and equipment

Grouting and cleaning	Identification. Knowledge, use and safety of basic tools	Identification. Knowledge, use and safety of basic tools and cleaning agents	Identification. Knowledge, use and safety of basic tools, and cleaning agents. Preparation of surfaces	Knowledge, use and safety of basic tools. Preparation of surfaces. Application of grout and cleaning agents
Fitting and repairing of carpets and tiles	Identification. Knowledge, use and safety of basic tools	Identification. Knowledge, use and safety of basic tools	Identification. Knowledge, use and safety of basic tools. Cutting of carpets and tiles	Skills application. Knowledge, use and safety of basic tools. Cutting of carpets and tiles. Application and replacement of tiles and carpets

3.2 Content Outline per Term

Year 1

WEEK	TOPIC	CONTENT The learner is able to:	Techniques, activities, resources and process notes
1	Introduction and Safety	• Identify all disciplines of maintenance. - Metal-works, mechanical maintenance, Electrical, Plumbing, woodwork, painting water-proofing and glazing, Building and Plastering, flooring and tiling • Demonstrate and apply all aspects of safety: - Personal (PPE), o Overall o Safety boots o Safety glasses o Safety gloves - Workshop o Safety rules and procedures in workshop o Observation of demarcations o Safety procedures in case of injuries, accidents, and fire regulations	• Demonstrations, theory • Audio-visual aids, media • Worksheets • OHS act o Theoretical explanation as well as practical demonstrations. o Videos about safety o Worksheet • Oral discussions in pairs and in groups • Access information from reference books or suitable resources • Sort information • Written presentations • Present information visually

		- Tools Safety rules and regulations regarding tools and equipment in the workshop - Materials o Safety regulations, precautions, storage and knowledge of materials e.g. flammable, non-flammable, hazardous and non-hazardous. - Machinery o Safety regulations and precautions regarding machines • Demonstrate and apply good general housekeeping in workshops o Proper storage of tools and materials o Care and maintenance of tools, equipment and machinery	ACTIVITY: good housekeeping, arrangement of tools accordingly
2	Metal-works	• Identify, have knowledge of use and safety, of different metalwork tools: - steel-rule, scriber, square, files, hacksaws, tin-snips • Identify, and have knowledge of various metals and their uses: - sheet-metal, round and square bar and tubing	

3	Mechanical maintenance	• Demonstrate and apply all aspects of safety pertaining to: o Vehicle maintenance – washing cleaning and polishing of vehicle interior and exterior o Tools and materials- polisher, vacuum cleaner, polish, shampoo, silicone, hosepipe and its accessories	
4	Electrical	• Demonstrate and apply all aspects of safety pertaining to: o Electrical wiring – colour coding 3 chord o Components – plug, single pole switch o Tools and equipment – screw-drivers, wire strippers, pliers, side-cutters and multi-meter	ACTIVITY: cutting and stripping wires
	Plumbing	• Demonstrate and apply all aspects of safety pertaining to: o plumbing tools – water-pump pliers, spanners, screw-drivers, hacksaw, shifter o materials. - copper, PVC, poly-corp, pipes • Identify types of pipes and its uses. - copper, PVC, poly-corp pipes	Observation
5	Woodwork	• Demonstrate and apply all aspects of safety pertaining to: o woodworking tools – steel rule, square, marking gauge, tenon saw, coping saw, chisels, planes, mallets and hammers o equipment and machinery – electric-drill, jig saw, planer, sander, grinder, router, circular saw, drill-press o materials. - timber (solid, chipboard, ply-wood), glue, screws and varnish	ACTIVITY: tool identification

		• Identify and have knowledge of:
		  ○ basic hand tools- steel rule, square, marking gauge, tenon saw, coping saw, chisels, mallets and hammers
		  ○ materials – timber (solid, chipboard, ply-wood) pine and saligna glue (hot and cold) and varnish (clear, stains, lacquer)	

6	Building and Plastering	• Demonstrate and apply all aspects of safety pertaining to:
		  ○ building tools and equipment – spades, wheel barrows, trowels, concrete mixer
		  ○ materials. - sand, stone, cement
		• Identify and have knowledge of tools and materials associated with building –
		  ○ Spades
		  ○ Spirit-levels
		  ○ Chalk-line
		  ○ Trowel
		  ○ Plaster tools
		  ○ Brush
		  ○ Straight-edge
		  ○ Cement and adhesives
		  ○ Mortar mixture
			Observation and identification of tools and material

7	Flooring and Tiling	• Demonstrate and apply all aspects of safety pertaining to: ○ flooring and tiling tools – Stanley knife, straight-edge, tile cutters,	

		trowel, angle grinders ○ materials- adhesives (glue- contact, tile fix, tile-bond, grout, tile cement) • Identify and have knowledge of: ○ Tools- – Stanley knife, straight-edge, tile cutters trowel, angle grinders, measuring tapes, spirit-levels ○ Materials- adhesives, spacers, edge trims.	ACTIVITY: minor activities for exploration
8	Painting, Glazing and water-proofing	• Demonstrate and apply all aspects of safety pertaining to: ○ Painting tools- brushes, ladders, scaffolding ○ Glazing tools- cutters, screwdrivers, squares ○ Water-proofing tools – brushes applicators ○ Materials- paints, cleaning agents (thinners, turpentine, benzene, mentholated spirits), sika and membrane	ACTIVITY: minor activities for exploration

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 25%

- e.g. Metalwork: Demonstrate how to cut 50mm round bar and file

Activity 2 Practical 25%

- e.g. Electrical Maintenance: Demonstrate how to wire a three-point plug

Activity 3 Practical 25%

- e.g. Plumbing: Demonstrate how to join elbow with poly cop pipe

Theory:

Activity 4 Respond to questions Pen and paper test (Oral or written) 25%

Year 2 Term 1

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**
1	Woodwork	• Identify basic marking and cutting hand tools • Mark and cut a piece of timber to size using a tri-square and tenon saw or other hand saw • Identify different sandpapers • Sandpaper to shape and finish a piece of timber	Identify and explain the use of basic hand tools. Demonstrate the use of marking and cutting tools by marking, cutting and sanding a small bread board
2-3		• Identify basic types of locks and hinges • Use the Electric Drill, Drill Press and Cordless Screwdriver. • Identify basic types of adhesives: cold glue, contact glue • Demonstrate the basic maintenance of tools and machines	Explanation, Demonstration, Practical work
4		• Use a Jig Saw, Sanding machine and Band Saw • Use Cold Glue • Make a hinged tool box. • Project - practical	Application of practical skills Demonstration, Practical Work Formal assessment: practical – manufacture of small wooden box
5-6	Metalwork	• Identify marking and cutting tools • Measure with a steel rule and mark off with a scriber on tubing, solid bar and sheet-metal	Marking, cutting and filing of metal to size and shape

		• Cut small metal bar or tube with hacksaw or tinsnips • File to square with a hand-file	
7		• Identify basic machine tools such as the Electric Drill, Angle Grinder, Drill Press, Bending Brake, Guillotine etc. and explain the functions of each • Explain the basic methods metals can be joined such as Soldering, Riveting, Screws, Gas Welding, Arc Welding • Mark and cut a small piece of sheet-metal • Drill and rivet • Solder	Identification, Explanation, Demonstration, Practical work Basic cutting and joining of pieces of sheet-metal
8		• Mark, cut and bend sheet metal to make a scoop • Use an Electric hand drill, Rivet gun and Bending Brake • Use a Vice and Drill press to make a L-shape bracket using flat bar • Primer and paint metal projects	Mark, Cut, Demonstrate, Practical work Formal assessment: manufacture of a scoop

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 40%

- e.g. Woodwork: Manufacture a wooden toolbox. (project can defer, maintaining use of same tools and material)

Activity 2 Practical 35%

- e.g. Metalwork: Manufacture of a scoop (project can defer, maintaining use of same tools and material)

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 2 Term 2

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**
1	Building and plastering	• Know the safety precautions regarding basic building wet works with emphasis on site safety and tool safety • Know the tools of building wet works and their use: Spirit level, spade, trowel, concrete mixer, wheelbarrow & sieve • Know the material in basic brick and plaster work and where to use each type of material: Sand: building, plastering, river Cements Bricks & blocks	Building contractors/ You Tube Building Tools Brick companies / Building material companies
2		• Know ladders and scaffolding: step, extension ladder • Set-up a small scaffolding structure • Use ladders and scaffolding safely • Prepare the area where repair work will be done: sanding	Ladders and scaffolding
3-4		• Know the ratios in mixing cement; concrete • Mix cement. • Mix concrete. • Know how to do wet works in a foundation and on a floor	You Tube Formal assessment- Demonstration of how to prepare a mortar mixture.

5 - 6	Electrical	• Differentiate between AC and DC power • Differentiate between Electrical hand tools and ordinary hand tools • Explain the colour coding of the 3-core cord • Wire a 3-pin plug	Identify AC and DC instruments and machines Explain why Electrical tools are insulated. Identify the 3 wires in a cord by colour and name.
7		• Join electrical wires using strip connectors, soldering • Demonstrate the use of wire strippers, side cutters, screwdrivers • Describe the differences between incandescent, energy saving light bulbs and LED lights • Explain the advantages and disadvantages of each light bulb • Safely change light bulbs • Explain load shedding and how to save energy	Explanation, Demonstration, Inspection of the school and report back.
8		• Introduce simple electrical circuit • Connect a light switch to a lamp-stand or lead light. • Make an extension cord • Make a lead light • Open up small appliances; Toasters, Irons, Fans and inspect for wear and safe wiring • Effect basic repairs to damaged wiring or loose connections • Testing current flow using a multi-meter	ACTIVITY: construct a basic simple circuit. Do not switch on the mains before the teacher observation. Formal assessment: demonstration on how to make a lead light or extension cord

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 35%

- e.g. Building and Plastering; Demonstrate how to prepare a mortar mixture

Activity 2 Practical 40%

- e.g. Electrical; Demonstrate how to make a lead-light or extension cord

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 2 Term 3

WEEK	TOPIC	CONTENT **The learner is able to:**	Techniques, activities, resources and process notes

1-2	Mechanical-maintenance	• Identify basic hand tools: hammers, screw-drivers, pliers, spanners, wrenches and tyre thread gauge
		• Identify basic serviceable parts of a vehicle inside and outside such as:
		  ○ Exterior- wiper blades and number plates,
		  ○ Interior- Radiator (coolant change), Dipstick (oil top up), Brake fluid bottle (top up), Transmission oil dipstick (top up)
		• Identify tyre tread-wear
			Observation

3-4		• Inspect tyres for uneven tread wear and explain the reasons. • Use the tyre pressure gauge to correctly inflate tyres • Identify and explain how different jacks work: trolley-jack, scissor jack, hydraulic jack • Operate a jack, wheel spanner and change tyres safely • Identify the vehicle battery and demonstrate how to safely remove and install it • Demonstrate how to care and maintain a vehicle battery. • Demonstrate how to wash the vehicle engine compartment,	Formal assessment: Demonstration on how to change and repair a tyre

		outlining safety precautions	
5-6	Plumbing	• Identify basic hand tools such as hacksaws, water pump-pliers, pipe cutters and spanners • Demonstrate how to use them • Differentiate between the different types and materials that pipes are manufactured such as copper, PVC, and poly-cop. • State where these pipes are used and why they are used there • Mark, cut and clean pipes	Identification of basic hand tools Explain the differences in pipes and their applications Mark, cut and clean pipes for joining
7		• Dismantle a tap and replace a tap washer • Demonstrate how to join PVC pipes • Demonstrate how to connect water pipes • Use a ladder safely and clean gutters • Explain how a cistern works	Explanation, Demonstration, Practical work- cleaning of gutters
8		• Reseat and replace a tap washer • Join PVC pipes • Join water pipes using Brass joiners and Soldering. • Clean drains and man-holes • Demonstrate how to un- block drains	Formal Assessment: demonstration on how to replace a tap washer

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 40%

- e.g. Mechanical Maintenance: Demonstrate how to change and repair a tyre

Activity 2 Practical 35%

- e.g. Plumbing: Demonstrate how to replace a tap washer

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 2 Term 4

WEEK	TOPIC	CONTENT **The learner is able to:**	Techniques, activities, resources and process notes
1-2	Painting, waterproofing and glazing	• Explain the need for Building Regulations • Identify and discuss the uses of basic hand tools used for painting, glazing and waterproofing; paint brushes, trays, scrapers, measuring tapes, glass polisher, glass cutters and hot air-gun • Explain the need for the proper preparation of surfaces before work begins • Identification of consumable cleaning materials: paraffin, turpentine, thinners and sandpapers <u>Waterproofing</u> • Identify the various structures in a building where waterproofing is essential; • Types of roofs and waterproofing methods on parapet roofs, end-wall flashings, box gutters and flat roofs • Identify causes of roof leaks in concrete tiles and corrugated sheet metal • Discuss how to repair the leakages • Explain the basic types of waterproofing methods; sealers, epoxies and membranes	Identification, Explanations, Tour of school- inspection and report on findings regarding painting, windows and waterproofing ACTIVITY: make good on findings by cleaning in preparation for either painting, waterproofing or glazing

3		PAINTINGS • Identify and explain the use of Primers, Bonding liquids, Roof paints, Interior and Exterior Paints. • Prepare a door/window frame, primer and paint • Safe storage of flammable and non-flammable materials	Identify, Explanation, Practical work Formal assessment: demonstration on how to paint a wooden, steel window, door and door frame
4		. GLAZING • State the basic types of glasses and where they are used	Explanation AND Demonstration cutting, measuring and installation of glass to frame using putty and beading
5-7	Flooring	• Identify different basic flooring finishing; Carpets, Ceramic tiles, Solid wood floors and Laminate floors • Explain the applications of floor fixatives for different finishing. • Discuss the pros and cons • Explain the need for proper preparation before installing different types of flooring; sanding, cleaning, waterproofing • Identify basic flooring tools; Stanley knives, trowels, tile cutters, cutting edges, and demonstrate their uses • Identification of basic materials; glues, tile cements, grouts, and discuss their uses	Formal Assessment: Demonstration on how to prepare a floor for tiling or carpeting

8 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 40%

- e.g. Painting and glazing: Demonstrate how to paint a wooden or steel window/door frame

Activity 2 Practical 35%

- e.g. Flooring: Demonstrate how to prepare a floor for tiling or carpeting

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 3 Term 1

WEEK	TOPIC	CONTENT **The learner is able to:**	Techniques, activities, resources and process notes
1-2	Building and plastering	• Discuss different building methods in different parts of the world • Explain the worldwide need to build economically and to conserve natural resources • Explain the need for correct mortar mixtures and the difference in strengths • Demonstrate safe lifting and carrying methods • Explain the need for building regulations • Identify basic building structures from the foundation to the roof • Demonstrate how to use a ladder safely	NB: use lime for mortar instead of cement ACTIVITY: construct 1metre long and six courses high half brickwork wall in stretcher bond ACTIVITY: plaster the wall with the emphasis on developing the skill of cutting excessive dagha (mortar) for levelling ACTIVITY: set up a ladder outside the classroom against wall and pole with a special emphasis on safety
3		• Know how to prepare surfaces to repair cracks on wall and on concrete	ACTIVITY: - chasing using bolster chisel and hammer -make good by sealing with mortar and or fillers
4		• Repair a concrete floor • Repair cracks on damaged plaster work	Formal assessment: Demonstrate how repair a crack on a wall or floor.
5-6	Flooring	• Know different tile types: ceramic, porcelain, vinyl, clay • Know safety rules on tiling	Demonstrate floor tile laying and proper spacing ACTIVITY: tile the half brick wall constructed

		• Be able to mix tiling adhesive • Be able to measure in mm. • Be able to prepare different surfaces before tiling can start • Be able to use an angle grinder • Replace a single tile	Instructions on product Measuring tapes
7-8		• measure and cut tiles • Replace a number of floor tiles using spacers. • Replace wall tiles	How to measure and cut tiles. How to do tiling on a wall and floor Formal assessment: Demonstration on how to replace a wall or floor tile.
9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.	

Practical:

Activity 1 Practical 40%

- e.g. Building and plastering: Demonstrate how to repair a crack on a wall or floor

Activity 2 Practical 35%

- e.g. Flooring: Demonstrate how to replace a wall or floor tile

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 3 Term 2

WEEK	TOPIC	CONTENT **The learner is able to:**	Techniques, activities, resources and process notes
1-2	Mechanical Maintenance	• Know OHS act and safety pertaining to workshop functioning • Know all basic safety rules when working on vehicles • Know and identify basic components/ parts on an engine • Know where the different engine components / parts are in the engine compartment	Product's manual Different engines Engines available
3		• Able to change plugs and filters on an engine and mechanical device: lawn-mower • Able to change all oils + fluids on a vehicle	ACTIVITY: plug, filters and oil changes
4		• Know the tools and how to use it when changing a tire and wheel: tire lever, trolley jack, wheel spanner, axle stands, and wheel trestles. • Know the difference between tires with tubes and tubeless tires • Be able to patch a tube and fix a tubeless tire	Practical activities using different tools listed on content column Formal Assessment: Demonstrate how to change plugs and filters on a motor vehicle and, or mechanical appliance: lawn-mower.
		• Able to wash, polish and vacuum a car	ACTIVITY: wash the car on site, polish and vacuum. • Safety measures to prevent scratching adhered to be emphasized

5-6	Painting and glazing	• Know the safety regulations regarding paints and paintwork. • Know the tools of paint work: brushes, scrapers, hot air-gun • Be able to prepare different surfaces before painting • Know different paint types: primer, acrylic, water, oil-based • Know how to dilute paints/ varnishes	Demonstrate the use of masks to prevent inhalation of toxic substances Tools Wall preparation prior to painting Mixing proportions for paint preparation Instructions on every product for painting.
7-8		• Adhere to safety regulations regarding glass usage • Be able to use tools required when working with glass: glass cutter, pliers, square, measuring tape, sandpaper, glass nippers • Setting out the glass sheet to minimize waste • Proper handling and transportation of glass • Cutting and profiling of glasses • Know how to putty a window pane • Apply the correct finishing touches after glazing	Demonstrate proper handling of glass using gloves Building regulations South Africa- An introduction to correct disposal of glasses Formal assessment: Activity 1: Demonstrate how to Paint a dry-wall. Activity 2: Demonstrate how to profile glass

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 35%

- e.g. Mechanical maintenance: Demonstrate how to change plugs and filters on motor-vehicle and mechanical appliance – lawn-mower

Activity 2 Practical 20%

- e.g. Painting: Demonstrate how to paint a dry-wall.

Activity3 Practical 20%

- e.g. Glazing: Demonstrate how to cut glass

Theory:

Activity 4 Respond to questions Pen and paper test (Oral or written) 25%

Year 3 Term 3

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**

1	Metalwork	• Apply the safety rules for filling with different files: square. round, half round. flat and triangular.
		• Cont. tools: center punch, hammers; different pliers and bench vice
		• Prevent metal from rust using relevant materials.
		  o PA 10, etch primer, hammerite paints
		• cut sheet metal using appropriate tools
		  o Tin snips
		• Do rust prevention
		• To light and adjust a gas torch
		• Solder any material
			Proper drilling procedure of metal piece secured on vice for safety
			Cutting to shape of metal sheet with tin snip to make key holder
			Appropriate procedure in soldering and gas torch welding

2		• Different rivets and their uses. • Measure and drill before riveting • Use rivets	Various rivets for observation Tools: measuring tape, drill and bits, rivets ACTIVITY: drilled plates provided for riveting
3		• Know the specific safety equipment required for welding, and how it's properly used. • Ensure the welding environment is adequately safe.	Series on safety equipment for welding Welding tools

4		• Know how to use different welding tools • Know how the different welding methods work. (arc; gas)	Demonstration on welding techniques. Formal assessment: manufacture a rake.
5	Plumbing	• Joining techniques pipes: copper, poly- cop, polyvinyl chloride (PVC) • Know the mechanism of toilets: flushing • Fix leaks on toilets: flushing, seals	Joining techniques in welding Activity: identify on site the problematic toilet and assign learners to fix it.
6-7		• Fix leaks- washing basin. taps, waste-pieces • To fix leaks in a bath- cracked bath, taps, wastes	Demonstration dismantling and assembling
8-		• Identify the tools for fixing downpipes and gutters: PVC weld, drill, screw-drivers, pliers, measuring tape, hacksaw, file • Use the tools for fixing downpipes and gutters.	Demonstration: Formal assessment- practical test to fit a gutter joint and down-pipe.

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 40%

- e.g. Metalwork: Manufacture a garden rake

Activity 2 Practical 35%

- e.g. Plumbing: Demonstrate how to fit a gutter joint and down-pipe

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 3 Term 4

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**
1	Electrical	• Know the different types of bulbs: bayonet, screw-type • Replace the different types of bulbs and apply safety precautions when changing bulbs • Distribution board (DB) - layout	Samples of bulbs for observatory learning Bulbs and instruction pamphlet
2-3		• Replace electrical fittings like stove elements and fuses • Repair household appliances; iron, kettle and toaster • Fix a broken extension lead	Practical demonstration on fitting elements and fuses on the stove and or microwave oven ACTIVITY; measuring the current on a fixed lead
4		• Replace starters/lamps on fluorescent fittings. • Wire a light • Know how to use connection blocks.	Formal Assessment: Activity 1: Change a stove element and fuse. Activity 2: demonstrate how to change a light-bulb and a starter for a fluorescent fitting.
5-6	Woodwork	• Know and apply the safety rules of cutting, planing and drilling tools in fitting of doors and windows: ○ Portables electrical tools: drills, screw-drivers, electric	Demonstration: marking out of mortices ACTIVITY: making mortices using marking gauge, chisel and mallet hammer.

		plane, skill saw. ○ Hand tools: chisels, mallet hammer, square, measuring tape, rip saw and jack plane • Know the different types of doors, door-frames, windows and their fittings: Masonite, solid, panel doors, top-hung, side-hung, and fixed • Know how to cut doors and frames using skill saw and hand saw • Know how to hang a door: fitting of hinges	DEMONSTRATION: Door hanging
7-		• Know different lock types: 2 lever, 3 lever mortise locks • To fit a door, handle and lock to a door	Dismantle and assemble the door lock Formal Assessment: demonstrate how to hang a house panel door and door lock fitting

8 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 20%

- e.g. Electrical: Demonstrate how to change a stove element and fuse

Activity 2 Practical 20%

- e.g. Electrical: Demonstrate how to change a light-bulb and starter for a fluorescent light fitting

Activity 3 Practical 35%

- e.g. Woodwork: Demonstrate how to hang an internal house panel door

Theory:

Activity 4 Respond to questions Pen and paper test (Oral or written) 25%

Year 4 Term 1

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**
1-2	Building and plastering	• Mix concrete for foundations and floors and explain the reasons for the difference in the MIX ratios of aggregates (stones), sand and cement. • Explain the need for compliance to building regulations • Read and explain a basic sketch plan of a small paving area or a bricked up braai stand by demonstrating its position in relation to other points such as a house, fence, carport, post box • Read a basic sketch plan and estimate quantities e.g. Number of bricks required, number of pockets of cement, number of wheelbarrows of sand etc. • Measure, layout and build a braai area using: o A tape measure o Straight edge o Spirit level o Mortar o Trowel / Spade / Bolster / Chalk line etc.	ACTIVITY • Mix different mortar ratios according to specific requirements. • Reading, Explanation and Discussion of sketch plans. • Estimate approximate quantities to build a Braai stand. Demonstrate how to layout a brick braai stand, construct a small foundation and brick up using building tools ACTIVITY: simple calculation of areas and unit of measurements conversion
3-4		• Installation of brick paving:	Explanation of how levelling for brick paving done

		• Explain the need for greater strength than ordinary bricks and therefore the change in the mortar mixture ratios.	Demonstration of paving ACTIVITY: Demonstrate how to lay out a metre square of paving from preparation to laying paver

5-6	Flooring and Tiling	• Explain how to lay out and set-out of first tile on the floor
		• Explain how to lay out and set-out of first tile on the wall using
		  ○ Measuring tape
		  ○ Spirit level
		  ○ Chalk line
		• Cut tiles using a basic tile cutter and angle grinder.
		• Mix tile fix to the correct consistency.
		• Tile a metre square using tile spacers.
			Demonstration of tiling lay out.
			Mixing of tile fix.
			Basic cutting and tiling

7-8		• Repair tears or cigarette damage to carpets and vinyl tiles using:
		  ○ Stanley cutters.
		  ○ Adhesives.
		  ○ Scrapers
		• Repair basic damage to Laminate floors by using:
		  ○ Measuring tapes
		  ○ Tri-squares
		  ○ Handsaws
		  ○ Mallets
		  ○ Jig saws and
		  ○ Skill saw
			Formal assessment:
			Demonstrate how to repair damaged Carpets and Laminate floors by cutting, gluing, replacing and re-adjusting.

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 40%

- e.g. Building and plastering Demonstrate how to layout and construct small foundations for a brick braai stand.

Activity 2 Practical 35%

- e.g. Flooring Demonstrate how to repair a damaged carpet or laminate floor.

Theory:

Activity 3 Respond to questions Pen and paper test (Oral or written) 25%

Year 4 Term 2

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**
1	Mechanical maintenance.	• Demonstrate how to safely clean and maintain Weed eaters, Lawn mowers, Shredders, Blowers and High Pressure cleaners. • Explain how to wash, clean and maintain the body of a vehicle using shampoos, waxes, polishes and silicon	Demonstrate safe cleaning and maintenance procedures for basic home and garden machines
2		• Identify all serviceable engine components and demonstrate how to safely clean the engine compartment using: Water / brushes / degreasers etc. • Safely jack up a car, remove tyres, inspect for damage and wear on tyres and rims, plug tubeless tyres, patch tubes, rotate tyres and re-assemble using: o Different vehicle jacks o Trolley jack o Jack stands o Tyre blocks / Chocks o Plugs / Patches	Clean engine compartment including battery terminals. Check acid level on battery
3-4		• Open sump nut and drain engine oil • Remove and replace Oil Filter using appropriate spanners	Formal assessment: activity 1 Demonstrate a complete minor service safely.

		• Remove and replace Air Filters
		• Flush Radiator and refill Coolant.
		• Top up Brake Fluid.
		• Top up Transmission Oil.
		• Remove and change Plugs using plug spanners.
		• Identify broken fuses and change them.
		• Inspect belts for wear.
		• Give an explanation of the basic workings and functions of vehicle components:
		  ○ Air and Oil filters.
		  ○ Water and oil pumps
		  ○ Alternators and batteries
		  ○ Power steering motors
		  ○ Manifolds and exhausts
			Do an Inspection Report

5-6	Painting, Glazing,
	Waterproofing
		• Dispose of glass safely.
		• Apply the sequence of preparation to painting by demonstrating:
		<u>Preparation & Priming</u>
		  ○ Cleaning
		  ○ Base coating
			Disposing of glass
			Discuss safety regulations and demonstrate how to handle glass.
			Measure and Cut of glass
			Demonstration of the preparation and painting process.
			Preparation and painting of different surfaces.
			Discuss ways of sealing defects, cracks, leaks, parapet

		WATERPROOFING
		• Discuss sealing of general leaks using:
		  ○ Sealers
		  ○ Membranes
		  ○ Sealing Compounds
		  ○ Resin Based methods
		  ○ Epoxies
		PAINTING
		• Prepare and paint wood, metals, brick, plaster Explain Water proofing solutions and processes.
			walls using different methods
			Formal assessment: Activity 2
			Demonstrate how to waterproof a shower wall.

7-8	Electrical	• Solder and insulate wires • Replace basic electrical switches and sockets • Replace electrical fittings • Repair house hold appliances • Replace fuse on a stove • Change defected female and male plugs on a lead wire. • Wire a bed lamp switch • Wire a single switch, two-way switch, doorbell, geyser, stove, dimmer switches • Change a ceiling Light • Add a spur (extra socket) from the existing socket	Demonstration on how to wire a trailer, bed lamp and plug. Formal assessment: Activity 3 Demonstrate how to solder and insulate wires. Description charts. Demonstrate adding extra socket (spur)

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 25%

- e.g. Mechanical Maintenance Demonstrate how to complete a minor service on a motor vehicle

Activity 2 Practical 25%

- e.g. Painting and glazing /waterproofing Demonstrate how to waterproof a shower wall.

Activity 3 Practical 25%

- e.g. Electrical Demonstrate adding extra socket (spur)

Theory:

Activity 4 Respond to questions Pen and paper test (Oral or written) 25%

Year 4 Term 3

WEEK	TOPIC	CONTENT **The learner is able to:**	**Techniques, activities, resources and process notes**
1-2	Metalwork and Welding	Application of safety measures in the usage of portable electrical power tools; drilling and grinding o Guillotine • Replace a newly bought safety gate. o Drilling o Welding o Mig and Tig machine • Identify and demonstrate how to use the bending machine for rolling/bending. o Box and pan brake o Pipe bender • Do basic brazing- using gas equipment o Knowledge and safety of oxygen and acetylene o Knowledge and safety of welding torch and equipment	Demonstrations Observation Activity: drilling and cutting activity of various metal thicknesses Demonstrations Activity: Use pattern provided for bending and rolling
3		• Manufacture a small project using the following skills: o Measuring and marking o Drilling and grinding o Welding or brazing	Formal assessment: Activity 1 Demonstrate how to braze using oxy-acetylene equipment

		○ Application of finish-primer, paints	
4-	Woodwork	• Knowledge, safety and of electric tools - drill, circular saw, band saw, portable plane and hand tools - chisels, saws, planes, marking-off, measuring • Cutting and planing to size pieces of timber to make joints: Butt, mortice and tenon, dovetail and lapped • Replace and hang a cupboard door, drawer, cupboard edging • Making a bench hook ○ Knowledge and safety of hand and electric tools- cordless drills, scrapers, knifes ○ Knowledge of adhesives – contact glue	Demonstrations ACTIVITY: Making of joints ACTIVITY: Making of round bread board using tongue and groove joint
5-6		• Manufacture a small SA pine timber project applying the following skills: ○ Measuring and marking- measuring tape, try-square ○ Cutting – saws (hand and electric) ○ Assembly and finishing- joints, fastening, adhesives, sealers and paints/varnish	Formal assessment: Demonstrate how to hang a cupboard door. Demonstrate how to replace a window frame.
7	Plumbing	• Determine what type of connection to use to fix certain leaks ○ Elbows. T pieces, couplings • Perform a leak fixing ○ Under the sink, toilet, tap • Finish off after fixing a leak	Demonstrations

		○ Sealers, silicone • Unblock a bath and or shower ○ Plungers, drain claws, chemicals • Connect gutters and downpipes with their fittings. • Fix and fit downpipes and fittings	Formal assessment: Activity 1 Demonstrate how to replace a sink mixer Oral discussions in pairs and in groups Access information from reference books or suitable resources Sort information Present information visually Practical demonstration
8		• Replace and fit toilet flushing mechanisms • Replace and fit bathroom sinks • Replace and fit a sink and or bath mixer ○ Knowledge and safety of plumbing tools and materials- spanners, fittings, cutters	

9 – 10	Formal Assessment	The weeks allocated for formal assessment are integrated across the weeks planned for teaching and learning. The assessment will consist of Practical Task/s with a 75% weighting and a Theory test with a 25% weighting.

Practical:

Activity 1 Practical 20%

- e.g. Metalwork Demonstrate how to braze using oxy-acetylene equipment

Activity 2 Practical 20%

- e.g. Woodwork Demonstrate how to hang a cupboard door

Activity 3 Practical 20%

- e.g. Woodwork Demonstrate how to replace a window frame

Activity 4 Practical 15%

- e.g. Plumbing Demonstrate how to unblock a drain and replace a sink mixer

Theory:

Activity 5 Respond to questions Pen and paper test (Oral or written) 25%

Year4 Term 4

WEEK	TOPIC	CONTENT Revision and Consolidation The learner is bale to:	Techniques, activities, resources and process notes
1-2	Metal- work Mechanical Maintenance Plumbing	• Know and apply basic skills to solve metal work problems • Maintain basic mechanical devices • Maintain plumbing installations	• Oral discussions in pairs and in groups • Access information from reference books or suitable resources • Sort information • Present information visually • Practical demonstration
3	Painting and Water-proofing Glazing Electrical	• Apply basic painting and water-proofing skills used in the building and construction industry • Apply basic glazing skills used in the building and construction industry • Maintain electrical appliances	
4	Woodworking Bricklaying and Plastering Flooring and Tiling	• Apply basic woodworking skills used in the building and construction industry • Apply basic bricklaying and plastering skills used in the building and construction industry • Apply basic flooring and tiling skills used in the building and construction industry	

5-10	External examination	External moderation of school assessment over terms 1, 2 and 3 = 50% of qualification Complete external Practical Assessment Task (PAT) = 25% of qualification Formal external assessment written test or oral = 25% of qualification

SECTION 4

ASSESSMENT

4.1 Introduction

This section on assessment *standardises* the recording and reporting processes for the Technical Occupational Curriculum and Assessment Policy Statement that is offered in schools that offer this learning programme. It also provides a policy framework for the management of school based assessment and school assessment records.

It is critically required of teachers to offer all measures of differentiated assessment as outlined in Chapter 9 of the National Protocol for Assessment. Especially learners in special schools who follow the Technical Occupational Curriculum over a period of four years have diverse learning styles and support needs. Since a learner or learners may be functioning on different levels, the assessment / recording / reporting system must make provision to reflect the level(s) of each leaner. Each learner, regardless of his/her number of years in the school, must have access to the standard of assessment best suited to his/her needs. The learner's *abilities* determine what will be expected of him/her and the *pacing* of instruction must accommodate each individual learner within a framework of high expectations (See Chapter 9 of the National Protocol for Assessment).

Learners are also eligible for Accommodations and Concessions as outlined in the Standard Operating Procedures for the Assessment of Learners who Experience Barriers to Assessment from Grade R to 12 (2017).

All decisions related to differentiated assessment are made through completing the protocols as outlined in the Policy on Screening, Identification, Assessment and Support (2014) and recorded and tracked through the Individual Support Plans of learners.

4.2 Assessment Principles

4.2.1 Definition

Assessment is a continuous planned process of identifying, gathering and interpreting information about the performance of learners, using various forms of assessment. It involves four steps: generating and collecting evidence of achievement; evaluating this evidence; recording the findings and using this information to understand and thereby assist the learner's development in order to improve the process of learning and teaching. Assessment should be both informal (Assessment

for Learning) and formal (Assessment of Learning). In both cases regular feedback should be provided to learners to enhance the learning experience.

Assessment is a process that measures individual learners' attainment of knowledge (content and concepts) and skills by collecting, analysing and interpreting the data and information obtained from this process to:

- Enable the teacher to judge a learner's progress in a reliable way;
- Inform learners of their strengths, weaknesses and progress; and
- Assist teachers, parents and other stakeholders in making decisions about the learning process and the progress of learners.

Assessment should be mapped against the content, skills, intended aims and topics specified in the learning programme. In both informal and formal assessments, it is important to ensure that in the course of a school year:

- All of the topics and content are covered;
- The full range of skills is included; and
- A variety of different forms of assessment are used.

4.2.2 Informal Assessment or Daily Assessment

Assessment for learning has the purpose of continuously collecting information on a learner's achievement that can be used to improve their learning. Informal assessment is a daily monitoring of learners' progress. This is done through observations, discussions, practical demonstrations, learner-teacher conferences, informal classroom interactions, etc. Informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how learning is progressing. Informal assessment should be used to provide feedback to the learners and to inform planning for teaching, but need not be recorded. It should not be seen as separate from learning activities taking place in the classroom. Learners or teachers can assess their performance in the tasks. Self-assessment and peer assessment actively involves learners in assessment. This is important as it allows learners to learn from and reflect on their own performance. The results of the informal daily assessment tasks are not formally recorded unless the teacher wishes to do so. **The results of daily, informal assessment tasks are not taken into account for progression, promotion and certification purposes.**

Informal, on-going assessments should be used to scaffold the acquisition of knowledge and skills and should be the stepping stones leading up to the formal tasks in the Programmes of Assessment.

4.2.3 Formal Assessment

All assessment tasks that make up a formal programme of assessment for the year are regarded as Formal Assessment. Formal Assessment Tasks are marked and formally recorded by the teacher for progression and certification purposes. All Formal Assessment Tasks are subject to moderation for the purpose of quality assurance and to ensure that appropriate standards are maintained. Formal assessment tasks form part of a year-long formal Programme of Assessment.

a. Why use a Formal Assessment task?

"Formal Assessment Task (assessment of learning)" – is a systematic way of assessment used by teachers to determine how well learners are progressing in a level and in a particular subject.

b. What is a Formal Assessment Task?

It is a set of questions and or instructions that learners need to respond to. A task may consist of a range of activities. A formal task must be valid, fair and reliable and must cover sufficient knowledge and or skills to report on the learners' progress.

Teachers must ensure that assessment criteria are very clear to the learners before the assessment process commences. This involves explaining to the learners which knowledge and skills are being assessed and the required length of responses. Feedback should be provided to the learners after assessment and could take the form of whole-class discussion or teacher-learner interaction. Examples of formal assessments include projects, oral presentations, simulations, performances, tests, examinations, practical demonstrations, etc. The **forms of assessment** used should be appropriate to the age and the developmental level of the learners as well as the context of the subject or skills being assessed. The assessment tasks should be carefully designed to cover the topic, content and or skills of the subject. The design of these tasks should therefore ensure that a variety of skills are assessed.

Practical Assessment Tasks allow for learners to be assessed on a regular basis during the school year and also allow for the assessment of skills that cannot be assessed in a written format, e.g. test or examination.

Assessment in the General Certificate of Education: Technical Occupational (GCE: TO)

Assessment in the GCE: TO is underpinned by the objectives of the National Qualifications Framework (NQF). These objectives are to:

- Create an integrated national framework for learning achievements.
- Facilitate access to and progression within education, training and career paths.
- Enhance the quality of education and training.
- Redress unfair discrimination and past imbalances and thereby accelerate employment opportunities.
- Contribute to the holistic development of the learner by addressing:
  - Social adjustment and responsibility;
  - Moral accountability and ethical work orientation;
  - Economic participation; and
  - Nation-building.

The principles that drive these objectives are:

- ***Integration***

  To adopt a unified approach to education and training that will strengthen the human resources development capacity of the nation.

- ***Relevance***

  To be dynamic and responsive to national development needs.

- ***Credibility***

  To demonstrate national and international values and acquired competencies and skills so as to ensure the recognition of the qualification to be attained.

- ***Coherence***

  To work within a consistent framework of principles and certification.

- ***Flexibility***

  To allow for creativity and resourcefulness when achieving skills to cater for different learning styles and use a range of assessment methods, instruments and techniques.

- ***Participation***

  To enable stakeholders to participate in setting standards and co-ordinating the achievement of the qualification.

- ***Access***

  To address barriers to learning at each level to facilitate learners' progress.

- ***Progression***

  To ensure that the qualification framework permits individuals to move through the levels of the national qualification via different, appropriate combinations of the components of the delivery system.

- ***Portability***

  To enable learners to transfer parts of a qualification from one learning institution and/or employer to another institution or employer.

- ***Articulation***

  To allow for vertical and horizontal mobility in the education system when pre-requisites for accreditation have been successfully completed.

- ***Recognition of Prior Learning***

  To grant credits for a unit of learning following an assessment or if a learner possesses the capabilities specified in each skills area.

- ***Validity of assessments***

  To ensure assessment covers a broad range of knowledge, skills, values and attitudes (SKVAs) needed to demonstrate applied competency. This is achieved through:

  - Clearly stating the skill to be assessed;
  - Selecting the appropriate or suitable evidence;
  - Matching the evidence with a compatible or appropriate method of assessment; and
  - Selecting and constructing an instrument(s) of assessment.

- ***Reliability***

  To assure assessment practices are consistent so that the same result or judgment is arrived at if the assessment is replicated in the same context. This demands consistency in the interpretation of evidence; therefore, careful monitoring of assessment is vital.

- ***Fairness and transparency***

  To verify that no assessment process or method(s) hinders or unfairly advantages any learner. The following could constitute unfairness in assessment:

  - Inequality of opportunities, resources or teaching and learning approaches;
  - Bias based on ethnicity, race, gender, age, disability or social class;
  - Lack of clarity regarding topic, content or skill being assessed; and
  - Comparison of learner's work with that of other learners, based on learning styles and language.

- ***Practicability and cost-effectiveness***

  To integrate assessment practices within the teaching and learning process and strive for cost and time-effective assessment.

4.3 Managing Assessment

Assessor Requirements

Assessors must be subject specialists with adequate formal assessment experience. If the teacher conducting the assessments has not been declared a competent assessor, an assessor who has been declared competent may be appointed to oversee the assessment process to ensure the quality and integrity of assessments for the qualification.

Types of Assessment

Assessment benefits the learner and the teacher. It informs learners about their progress and helps teachers make informed decisions at different stages of the learning process. Depending on the intended purpose, different types of assessment can be used.

- **Baseline assessment:** At the beginning of a level or learning experience, baseline assessment establishes the knowledge, skills, values and attitudes (SKVAs) that learners bring to the classroom. This knowledge assists teachers to plan learning programmes and learning activities.

- **Diagnostic assessment:** This assessment diagnoses the nature and causes of barriers to learning experienced by specific learners. It is followed by guidance, appropriate support and intervention strategies. This type of assessment is useful to make referrals for learners requiring specialist help.

- **Formative assessment (Informal Assessment):** This assessment monitors and supports teaching and learning. It determines learners' strengths and weaknesses and provides feedback on progress. It determines if a learner is ready for summative assessment.

- **Summative assessment (Formal Assessment)** This type of assessment gives an overall picture of student progress at a given time. It determines whether the student is sufficiently competent to progress to the next level.

Planning Assessment

An assessment plan should cover three main processes:

- **Collecting evidence:** The assessment plan indicates which learning programme topics, content and skills will be assessed, what assessment method or activity will be used and when this assessment will be conducted.

- **Recording:** The process of recording refers to the assessment instruments or tools with which the assessment will be captured or recorded. Therefore, appropriate assessment instruments must be developed or adapted.

- **Reporting:** All the evidence is put together in a report to deliver a decision for the subject.

Methods of Assessment

Methods of assessment refer to who carries out the assessment and includes teacher assessment, self-assessment, peer assessment and group assessment.

TEACHER ASSESSMENT	The Teacher assesses learners' performance against given criteria in different contexts, such as individual work, group work, etc.
SELF-ASSESSMENT	Learners assess their own performance against given criteria in different contexts, such as individual work, group work, etc.
PEER ASSESSMENT	Learners assess another student or group of learners' performance against given criteria in different contexts, such as individual work, group work, etc.

GROUP ASSESSMENT	Learners assess the individual performance of other learners within a group or the overall performance of a group of learners against given criteria.

Task lists and **checklists** show the learners what needs to be done. They consist of short statements describing the expected performance in a particular task. The statements on the checklist can be ticked off when the learner has adequately achieved the criterion. Checklists and task lists are useful in peer or group assessment activities.

Rubrics are a hierarchy (graded levels) of criteria with benchmarks that describe the minimum level of acceptable performance or achievement for each criterion. It is a different way of assessment and cannot be compared to tests. Each criterion described in the rubric must be assessed separately. Mainly, two types of rubrics, namely holistic and analytical, are used.

Competence Descriptions

All assessment should award marks to evaluate specific assessment tasks. However, marks should be awarded against rubrics and not simply be a total of ticks for right answers. Rubrics should explain the competence level descriptors for the skills, knowledge, values and attitudes (SKVAs) a learner must demonstrate to achieve each level of the rating scale. When teachers or assessors prepare an assessment task or question, they must ensure that the task or question addresses an aspect of a topic or skill. The relevant content must be used to create the rubric to assess the task or question. The descriptions must clearly indicate the minimum level of attainment for each category on the rating scale.

Strategies for Collecting Evidence

A number of different assessment instruments may be used to collect and record evidence. Examples of instruments that can be (adapted and) used in the classroom include:

Record sheets: The teacher observes learners working in a group. These observations are recorded in a summary table at the end of each task. The teacher can design a record sheet to observe learners' interactive and problem-solving skills, attitudes towards group work and involvement in a group activity.

Checklists: Checklists should have clear categories to ensure that the objectives are effectively met. The categories should describe how the activities are evaluated and against what criteria they are evaluated. Space for comments is essential.

School Assessment Programme

The **Programme of Assessment** is designed to spread formal assessment tasks in all subjects in a school across a term.

The programme of assessment should be recorded in the Teacher's planning file (Portfolio of Assessment) for each subject.

The following should at least be included in the Teacher's File:

- A contents page;
- The formal schedule of assessment;
- The requirements for each assessment task;
- The tools used for each assessment task;
- Recording instrument(s) for each assessment task; and
- A mark sheet and report for each assessment task.

The learner's Evidence of Performance must at least include:

- A contents page;
- The assessment tasks according to the assessment programme as indicated below;
- The assessment tools or instruments for the task; and
- A record of the marks (and comments) achieved for each task.

Where tasks cannot be contained as evidence in the Portfolio of Evidence (PoE), its exact location must be recorded and it must be readily available for moderation purposes.

Assessment across the four years

Year 1 Reporting only in the term when the skill is done.

The GCE Technical Occupational Qualification at NQF Level 1 is a four-year Learning Programme. In year one a learner is exposed to a number of Occupational Subjects. Each subject is offered over a ten-week period (one term) in Year 1, where the learner is exposed to the basic skills required for the subject. By the end of year 1 the learner will select a minimum of one skill for the qualification.

Year 1	**Formal School-Based Assessments**
	Learner performance in the Term:
	Practical 75%
	Theory 25%
Term Report	100%

Years 2 and 3

Year 2 will focus on a broad overview of the subject with a basic understanding and mastery of some of the basic skills required in the subject. Year 3 will focus on the consolidation of the basic skills and the addition of more advanced skills. Learners must in Year 3 start to develop a greater degree of independent mastery of the subject skills.

Year 2/3	**Formal School-Based Assessments**			**Final End-of-Year Assessments**
	Term 1	Term 2	Term 3	Term 4
	Practical 75%	Practical 75%	Practical 75%	○ Practical 75%
	Theory 25%	Theory 25%	Theory 25%	
				○ Pen and Paper Test/ Exam 25%
Term Report	100%	100%	100%	
End of Year	SBA 75%			25%

Year 4 Qualification year

In year 4 the focus shifts to the World of Work. Learners must consolidate required skills for the qualification and may engage in workplace exposure for a short period of time during the fourth year. Learners develop independent mastery of skills to be competent within the workplace.

<table>
<tr><td rowspan="5">Year 4</td><td colspan="3">Formal School-Based Assessments</td><td>Final End-of-Year Assessments</td></tr>
<tr><td>Term 1</td><td>Term 2</td><td>Term 3</td><td>Term 4</td></tr>
<tr><td>Practical 75%</td><td>Practical 75%</td><td>Practical 75%</td><td rowspan="2">External Practical Assessment Task
25%</td></tr>
<tr><td>Theory
25%</td><td>Theory
25%</td><td>Theory
25%</td></tr>
<tr><td></td><td></td><td></td><td rowspan="2">External
Pen and Paper Test
25%</td></tr>
<tr><td>Term
Report</td><td>100%</td><td>100%</td><td>100%</td></tr>
<tr><td>End of
Year</td><td colspan="3">SBA
50%</td><td>External Exams
50%</td></tr>
</table>

CLARIFICATION ON ASSESSMENT PERIODS

Year 2 and 3:

Term 1 theory assessment to consist of work done in term 1 only

Term 2 theory assessment to consist of work done in terms 1 and 2

Term 3 theory assessment to consist of work done in term 3 only

Term 4 theory assessment to consist of work done in terms 3 and 4

Year 4:

Term 1 theory assessment to consist of work done in term 1 only

Term 2 theory assessment to consist of work done in terms 1 and 2

Term 3 theory assessment to consist of work done in terms 1, 2 and 3

Term 4 Theory completed in the year

Timing of formal assessment

Suggested Program of formal and assessment

*These may consist of one or a number of smaller activities.

Year 1					
Term	**Content/ concept/skill**	**Activities**	**Forms of Assessment**	**%**	**FATs based on activities in CAPS: TO**
1 Term	**Metalwork**: • Able to measure cut and file metal and apply knowledge of safety rules pertaining to metalwork tools and material	**Activity 1** Demonstrate how to cut 50mm round bar and file	Practical	25%	FAT 1
	Electrical Maintenance: • Able to differentiate between the colours of wiring and apply knowledge of safety rules pertaining to electrical tools and material	**Activity 2** Demonstrate how to wire a three-point plug	Practical	25%	
	Plumbing • Able to measure cut and fit poly- cop pipe with compression fittings and apply the knowledge of safety rules pertaining to plumbing tools and material	**Activity 3** Demonstrate how to join elbow with poly cop pipe	Practical	25%	
	Theory: Electrical Maintenance, Plumbing and Metalwork: • Safety rules and regulations regarding tools and equipment in the workshop	**Activity 4** Respond to questions	Pen and paper test (Oral or written	25%	

Year 2					
Term	**Content/ concept/skill**	**Activities**	**Forms of Assessment**	**%**	**FATs based on activities in CAPS: TO**
Term 1	**Woodwork:** • Able to measure mark cut and drill timber • Able to join, assemble, prepare and finish project	**Activity 1** Manufacture of a wooden toolbox. (project can defer, maintaining use of same tools and material)	Practical	40%	FAT 1
	Metalwork: • Able to measure mark cut round bar sheet-metal. • Able to bend bar and sheet-metal	**Activity 2** Manufacture of a scoop (project can defer, maintaining use of same tools and material)	Practical	35%	
	Theory: Woodwork and Metalwork • Knowledge safety and uses of tools equipment and material	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	
Term 2	**Building and plastering;** • Able to prepare mortar mixture and apply to surfacing • Able to use ladder and scaffolding.	**Activity 1** Demonstrate how to prepare a mortar mixture	Practical	35%	FAT 2
	Electrical; • Able to identify, strip, connect wires and apply	**Activity 2** Demonstrate how to make a lead-light or	Practical	40%	

	knowledge use and safety of electrical tools equipment and material	extension cord			
	Theory: Building and plastering and Electrical • Knowledge, safety, uses and maintenance of tools equipment and material	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	
Term 3	**Mechanical Maintenance:** • Able to identify, use and apply knowledge of safety and maintenance of tools and equipment	**Activity 1** Demonstrate how to change and repair a tyre	Practical	40%	
	Plumbing: • Able to identify, use and apply knowledge, safety and maintenance of plumbing tools equipment and material	**Activity 2** Demonstrate how to replace a tap washer	Practical	35%	FAT 3
	Theory: Mechanical Maintenance and Plumbing • Knowledge, safety, uses and maintenance of tools equipment and material	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	
Term 4	**Painting and glazing**: • Able to identify, use and apply knowledge of safety and maintenance of painting tools and material	**Activity 1** Demonstrate how to paint a wooden or steel window/door frame	Practical	40%	FAT 4

	Flooring: • Able to identify, use and apply knowledge of safety and maintenance of flooring tools, hardware, adhesives and material	**Activity 2** Demonstrate how to prepare a floor for tiling or carpeting		35%	
	Theory: Painting, glazing and Flooring • Knowledge, safety, uses and maintenance of tools equipment and material	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	

Year 3:					
Term	**Content/ concept/skill**	**Activities**	**Forms of Assessment**	**%**	**FATs based on activities in CAPS: TO**
Term 1	**Building and plastering:** • Able to identify, use and apply knowledge of safety and maintenance of building tools and material	**Activity 1**: Demonstrate how to repair a crack on a wall or floor	Practical	40%	FAT 1
	Flooring: • Able to identify, use and apply knowledge of safety and maintenance of tiling tools and material	**Activity 2:** Demonstrate how to replace a wall or floor tile	Practical	35%	
	Theory: Building and plastering and Flooring • Knowledge, safety, uses and maintenance of tools equipment and processes on tiling, adhesives, and mortar mixtures	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	
Term 2	**Mechanical maintenance:** • Able to identify, use and apply knowledge of safety, maintenance of tools and equipment. • Able to identify and apply knowledge of different plugs and filters.	**Activity 1** Demonstrate how change plugs and filters on motor-vehicle and mechanical appliance – lawn-mower	Practical	35%	FAT 2

	Painting and Glazing: • Able to identify, use and apply knowledge of safety, maintenance of tools and equipment and materials. • Able to identify and apply knowledge of paints and processes of glass cutting.	**Activity 2**: Demonstrate how to paint a dry-wall.	Practical	20%	
		Activity 4: Demonstrate how to cut glass	Practical	20%	
	Theory: Mechanical Maintenance andPainting and glazing • Knowledge, safety, uses and maintenance of tools, equipment and materials as well as processes on painting, glazing and changing of fluids in vehicles	**Activity 4** Respond to questions	Pen and paper test (Oral or written	25%	
Term 3	**Metalwork:** • Able to identify, use and apply knowledge of safety and maintenance of metalwork tools and material. • Able to identify and apply knowledge of different metals and methods of joining metal.	**Activity 1** Manufacture a garden rake	Practical	40%	FAT 3
	Plumbing: • Able to identify, use and apply knowledge, safety and maintenance of plumbing tools equipment	**Activity 2**: Demonstrate how to fit a gutter joint and down-pipe		35%	

	and material. • Able to identify and apply knowledge of pipes, fittings and methods of joining the different pipes.				
	Theory: Metalwork and Plumbing • Knowledge, safety, uses and maintenance of tools, equipment and materials as well as processes on joining metals and plumbing pipes.	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	
Term 4	**Electrical:** • Able to identify, use and apply knowledge, safety and maintenance of electrical tools equipment and material. • Able to identify and apply knowledge of different bulbs and fittings	**Activity 1:** Demonstrate how to change a stove element and fuse	Practical	20%	
		Activity 2: Demonstrate how to change a light-bulb and starter for a fluorescent light fitting.	Practical	20%	
	Woodwork: • Able to identify, use and apply knowledge, safety and maintenance of woodwork cutting and drilling tools, equipment and material. • Able to identify and apply knowledge of doors, hinges and processes on hanging various doors.	**Activity 3** Demonstrate how to hang an internal house panel door	Practical	35%	FAT 4

	Theory: Electrical and Woodwork • Knowledge, safety, uses and maintenance of woodwork and electrical tools, equipment and materials, as well as knowledge of different bulbs and doors.	**Activity 4** Respond to questions	Pen and paper test (Oral or written	25%	

Year 4					
Term	**Content/ concept/skill**	**Activities**	**Forms of Assessment**	**%**	**FATs based on activities in CAPS: TO**
Term 1	**Building and plastering** • Able to identify, use and apply knowledge of safety and maintenance of building tools and material • Able to read apply knowledge of measurements and estimates of building material.	**Activity 1** Demonstrate how to layout and construct small foundations for a brick braai stand.	Practical	**40%**	FAT 1
	Flooring • Able to identify, use and apply knowledge of safety and maintenance of tiling, carpeting and laminate floor tools and material	**Activity 2** Demonstrate how to repair a damaged carpet or laminate floor.	Practical	**35%**	
	Theory: Building and plastering/ flooring • Knowledge, safety, uses and maintenance of tools equipment and processes on building, carpeting and laminates, adhesives, paving bricks, and mortar mixtures	**Activity 3** Respond to questions	Pen and paper test (Oral or written	25%	

Term 2	**Mechanical Maintenance** • Able to identify, use and apply knowledge of safety, maintenance of tools and equipment in the service of a motor vehicle. • Able to identify and apply knowledge of fluids (oils) and filters for different vehicles and machinery	**Activity 1** Demonstrate how to complete a minor service on a motor vehicle	Practical	25%	FAT 2
	Painting and glazing/waterproofing • Able to identify, use and apply knowledge of safety and maintenance of glazing tools, equipment and materials. • Able to identify and apply knowledge of paints and processes of application • Able to identify use and apply knowledge of safety and maintenance of waterproofing tools and materials	**Activity 2** Demonstrate how to waterproof a shower wall.	Practical	25%	
	Electrical • Able to identify, use and apply knowledge, safety and maintenance of	**Activity 3** Demonstrate how to repair a broken extension cord	Practical	25%	

	electrical tools equipment and material. • Able to identify and apply knowledge of different electrical switches.				
	Theory: Mechanical Maintenance, Painting, Glazing and Electrical • Knowledge, safety, uses and maintenance of tools, equipment and materials as well as processes on painting, glazing, maintenance of vehicles, and repair on electrical components.	**Activity 4** Respond to questions	Pen and paper test (Oral or written	25%	
Term 3	**Metalwork** • Able to identify, use and apply knowledge of safety and maintenance of metalwork tools and material. • Able to identify and apply knowledge of different metals and methods of welding, as well as the processes of drilling and grinding metal.	**Activity 1** Demonstrate how to braze using oxy-acetylene equipment.	Practical	20%	FAT 3
	Woodwork • Able to identify, use and apply knowledge, safety and maintenance of	**Activity 2** Demonstrate how to hang a cupboard door.	Practical	20%	

	woodwork cutting and drilling tools, equipment and material. • Able to identify and apply knowledge of doors, hinges and processes on hanging various doors and window frames. • Able to identify and apply adhesives for edging of cupboards.				
		Activity 3 Demonstrate how to replace a window frame	Pratical	20%	
	Plumbing • Able to joining pipes, sanitary ware, taps and mixers and unblock drains	**Activity4** Demonstrate how to unblock a drain and replace a sink mixer	Pratical	15%	
	Theory: Metalwork, Woodwork and Plumbing • Knowledge, safety, uses and maintenance of tools, equipment and materials as well as processes on joining metals and the hanging of a cupboard door	**Activity 5** Respond to questions	Pen and paper test (Oral or written	25%	
Term 4	Core content and Concept across the years	External moderation of school assessment over terms 1, 2 and 3.		50%	GCE: TO Qualification
		Activity 1 Practical	Formal external Practical Assessment Task	25%	

		Activity 2 Respond to questions	Formal external assessment: Written test (or oral where necessary)	25%	

Recording and Reporting

Recording is a process in which the teacher documents the level of a learner's performance in a specific assessment task. It indicates learner progress towards the achievement of the knowledge and skill. Records of learner performance should provide evidence of the learner's progression. Records of learner performance should also be used to verify the progress made by teachers and learners in the teaching and learning process. Reporting is a process of communicating learner performance to learners, parents, schools, and other stakeholders. Learner performance can be reported in a number of ways. These include report cards, parents' meetings, school visitation days, parent-teacher conferences, phone calls, letters, class or school newsletters, etc.

Good record keeping is essential in all assessment, particularly in continuous assessment. A record book or file must be kept up to date by each teacher. It should contain:

- Learners' names;
- Dates of assessment;
- Name and description of the assessment activity;
- The results of assessment activities, according to Subject; and
- Comments for support purposes.

Teachers report in percentages against the subject. The various achievement levels and their corresponding percentage bands are as shown in the table below. Recording is a process in which the teacher documents the level of a learner's performance. Teachers record the actual raw marks against the task using a record sheet. Records of learner performance should also be used to verify the progress made by teachers and learners in the teaching and learning process. Records should be used to monitor learning and to plan ahead.

Note: The seven-point scale should have clear descriptions that give detailed information for each level. Teachers will record actual marks against the task by using a record sheet; and report percentages against the subject on the learners' report cards.

Codes and percentages for reporting

Rating code	Description of competence	Percentage	Nature of support provided to learners
7	Outstanding achievement	80 – 100	Independent
6	Meritorious achievement	70 – 79	Independent, verbal cues needed
5	Substantial achievement	60 – 69	Minimum support
4	Adequate achievement	50 – 59	Moderate support
3	Moderate achievement	40 – 49	Maximum support (Physical / Verbal)
2	Elementary achievement	30 – 39	Goals to be revisited – Change of direction required.
1	Not achieved	0 – 29	Little / no interest shown in the activity despite maximum support

All records must be accessible, easy to interpret, securely kept, confidential and helpful in the teaching and reporting process. The school assessment policy determines the details of how record books must be completed. Schools are required to provide quarterly feedback to parents on the Programme of Assessment, using a formal reporting tool, such as a report card. The schedule and the report card should indicate the overall level of performance of a learner.

NOTE:

Criterion referencing is best used to describe learner's performance in a skill. Teachers must make use of suitable analytical rubrics when assessing a learner's competence for a specific skill using practical demonstrations.

Progression and Promotion:

Learners will progress with age cohort in this Phase (Year 1-4). Where a learner does not meet the minimum requirements to be promoted to the next year then a learner may spend one extra year in the phase (Year 1-4) to strengthen their ability to achieve the qualification.

4.4 Moderation of Assessment

Moderation refers to the process that ensures that the assessment tasks are fair, valid and reliable. Moderation must be implemented at school, district, and provincial levels as required. Comprehensive and appropriate moderation practices must be in place for the quality assurance of all subject assessments. The Formal School Based Assessment and the practical assessment tasks must be moderated by the relevant subject specialists at the district and, if required, provincial levels in consultation with the moderators at school.

Moderation serves five purposes:

1. It must ascertain whether subject content and skills have been sufficiently covered.
2. The moderator must ensure that the correct balance of cognitive demands are reflected in the assessments.
3. The assessments and marking are of an acceptable standard and consistency.
4. The moderator must make judgements about the comparability of learner performance across schools; whilst recognising that teachers teach in different ways.
5. The subject specialist/moderator must identify areas in which a teacher may need development and support and must ensure that this support is provided.

4.4.1 Internal moderation

Assessment must be moderated according to the internal moderation policy of the School, Provincial and National Departments. Moderation is a continuous process. The moderator's involvement starts with the planning of assessment methods and instruments and follows with continuous collaboration with and support to the assessors. Internal moderation creates common understanding of topics and skills and maintains these across the learning programmes.

4.4.2 External moderation

External moderation is conducted by the Districts and or Provincial offices, Department of Basic Education, Umalusi and, where relevant, the QCTO. The external moderator:

- Monitors and evaluates the standard of all summative assessments;
- Maintains standards by exercising appropriate influence and control over assessors;
- Ensures proper procedures are followed;

- Ensures summative integrated assessments are correctly administered;
- Observes a minimum sample of 12 summative assessments in total;
- Gives written feedback to the relevant quality assuror; and
- Moderates in case of a dispute between an assessor and a student.

Policy on inclusive education requires that assessment procedures for students who experience barriers to learning be customised and supported to enable these students to achieve their maximum potential.

Moderation is therefore an on-going process and not a once-off end-of-year event.

4.5 General

This document should be read in conjunction with:

- White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001);
- *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R – 12*; and (NPPPPR) (2011);
- *National Protocol for Assessment Grades R – 12. (NPA) (2011);*
- *Guidelines for Responding to Diversity in the Classroom through the Curriculum and Assessment Policy Statements* (2011);
- *Guidelines to Ensure Quality Education and Support in Special Schools and Special School Resource Centres* (2013);
- *Policy on Screening, Identification, Assessment and Support* (2014);
- *Guidelines for Full-service/Inclusive Schools* (2010); and
- *Standard Operating Procedures for Assessment of Learners who Experience Barriers to Assessment* (2016).

SECTION 5

RESOURCES