education

Department:
Education
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATES (VOCATIONAL)

ASSESSMENT GUIDELINES

ELECTRICAL WORKMANSHIP

NQF Level 3

September 2007

ELECTRICAL WORKMANSHIP– LEVEL 3

CONTENTS

SECTION A: PURPOSE OF THE SUBJECT ASSESSMENT GUIDELINES

This document provides the lecturer with guidelines to develop and implement a coherent, integrated assessment system for Workshop Practice and Electrical Workmanship in the National Certificates (Vocational). It must be read with the *National Policy Regarding Further Education and Training Programmes: Approval of the Documents, Policy for the National Certificates (Vocational) Qualifications at Levels 2 to 4 on the National Qualifications Framework (NQF)*. This assessment guideline will be used for National Qualifications Framework Levels 2-4.

This document explains the requirements for the internal and external subject assessment. The lecturer must use this document with the *Subject Guidelines: Workshop Practice* and *Electrical Workmanship* to prepare for and deliver Workshop Practice (Level 2) and Electrical Workmanship (Level 3). Lecturers should use a variety of resources and apply a range of assessment skills in the setting, marking and recording of assessment tasks.

SECTION B: ASSESSMENT IN THE NATIONAL CERTIFICATES (VOCATIONAL)

1 ASSESSMENT IN THE NATIONAL CERTIFICATES (VOCATIONAL)

Assessment in the National Certificates (Vocational) 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 student 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 value and recognition of qualification and acquired competencies and skills.

- ***Coherence***

To work within a consistent framework of principles and certification.

- ***Flexibility***

To allow for creativity and resourcefulness when achieving Learning Outcomes, 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 students' 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 students to transfer credits of qualifications 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 accredited pre-requisites have been successfully completed.

- ***Recognition of Prior Learning***

To grant credits for a unit of learning following an assessment or if a student possesses the capabilities specified in the outcomes statement.

- ***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 outcome 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 student. 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 Learning Outcome being assessed
  - Comparison of students' work with other students, based on learning styles and language

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

To integrate assessment practices within an outcomes-based education and training system and strive for cost and time-effective assessment.

2 ASSESSMENT FRAMEWORK FOR VOCATIONAL QUALIFICATIONS

The assessment structure for the National Certificates (Vocational) qualification is as follows:

2.1 Internal continuous assessment (ICASS)

Knowledge, skills values, and attitudes (SKVAs) are assessed throughout the year using assessment instruments such as projects, tests, assignments, investigations, role-play and case studies. The internal continuous assessment (ICASS) practical component is undertaken in a real workplace, a workshop or a "Structured Environment". This component is moderated internally and externally quality assured by Umalusi. All internal continuous assessment (ICASS) evidence is kept in a Portfolio of Evidence (PoE) and must be readily available for monitoring, moderation and verification purposes.

2.2 External summative assessment (ESASS)

The external summative assessment is either a single or a set of written papers set to the requirements of the Subject Learning Outcomes. The Department of Education administers the theoretical component according to relevant assessment policies.

A compulsory component of external summative assessment (ESASS) is the **integrated summative assessment task (ISAT).** This assessment task draws on the students' cumulative learning throughout the year. The task requires **integrated application of competence** and is executed under strict assessment conditions. The task should take place in a simulated or "Structured Environment". The integrated summative assessment task (ISAT) is the most significant test of students' ability to apply their acquired knowledge.

The integrated assessment approach allows students to be assessed in more than one subject with the same integrated summative assessment task (ISAT).

External summative assessments will be conducted annually between October and December, with provision made for supplementary sittings.

3 MODERATION OF ASSESSMENT

3.1 Internal moderation

Assessment must be moderated according to the internal moderation policy of the Further Education and Training (FET) college. Internal college 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 Assessment Standards and maintains these across vocational programmes.

3.2 External moderation

External moderation is conducted by the Department of Education, Umalusi and, where relevant, an Education and Training Quality Assurance (ETQA) body according to South African Qualifications Authority (SAQA) and Umalusi standards and requirements.

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 ten (10) to twenty-five (25) percent of summative assessments;
- 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.

4 PERIOD OF VALIDITY OF INTERNAL CONTINUOUS ASSESSMENT (ICASS)

The period of validity of the internal continuous assessment mark is determined by the *National Policy on the Conduct, Administration and Management of the Assessment of the National Certificates (Vocational).*

The internal continuous assessment (ICASS) must be re-submitted with each examination enrolment for which it constitutes a component.

5 ASSESSOR REQUIREMENTS

Assessors must be subject specialists and should ideally be declared competent against the standards set by the ETDP SETA. If the lecturer 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.

6 TYPES OF ASSESSMENT

Assessment benefits the student and the lecturer. It informs students about their progress and helps lecturers make informed decisions at different stages of the learning process. Depending on the intended purpose, different types of assessment can be used.

6.1 Baseline assessment

At the beginning of a level or learning experience, baseline assessment establishes the knowledge, skills, values and attitudes (SKVAs) that students bring to the classroom. This knowledge assists lecturers to plan learning programmes and learning activities.

6.2 Diagnostic assessment

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

6.3 Formative assessment

This assessment monitors and supports teaching and learning. It determines student strengths and weaknesses and provides feedback on progress. It determines if a student is ready for summative assessment.

6.4 Summative 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.

7 PLANNING ASSESSMENT

An assessment plan should cover three main processes:

7.1 Collecting evidence

The assessment plan indicates which Subject Outcomes and Assessment Standards will be assessed, what assessment method or activity will be used and when this assessment will be conducted.

7.2 Recording

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.

7.3 Reporting

All the evidence is put together in a report to deliver a decision for the subject.

8 METHODS OF ASSESSMENT

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

LECTURER ASSESSMENT	The lecturer assesses students' performance against given criteria in different contexts, such as individual work, group work, etc.
SELF-ASSESSMENT	Students assess their own performance against given criteria in different contexts, such as individual work, group work, etc.
PEER ASSESSMENT	Students assess another student's or group of students' performance against given criteria in different contexts, such as individual work, group work, etc.
GROUP ASSESSMENT	Students assess the individual performance of other students within a group or the overall performance of a group of students against given criteria.

9 INSTRUMENTS AND TOOLS FOR COLLECTING EVIDENCE

All evidence collected for assessment purposes is kept or recorded in the student's PoE.

The following table summarises a variety of methods and instruments for collecting evidence. A method and instrument is chosen to give students ample opportunity to demonstrate the Subject Outcome has been attained. This will only be possible if the chosen methods and instruments are appropriate for the target group and the Specific Outcome being assessed.

	METHODS FOR COLLECTING EVIDENCE		
	Observation-based (Less structured)	**Task-based** (Structured)	**Test-based** (More structured)
Assessment instruments	• Observation • Class questions • Lecturer, student, parent discussions	• Assignments or tasks • Projects • Investigations or research • Case studies • Practical exercises • Demonstrations • Role-play • Interviews	• Examinations • Class tests • Practical examinations • Oral tests • Open-book tests
Assessment tools	• Observation sheets • Lecturer's notes • Comments	• Checklists • Rating scales • Rubrics	• Marks (e.g. %) • Rating scales (1-7)
Evidence	• Focus on individual students • Subjective evidence based on lecturer observations and impressions	**Open middle**: Students produce the same evidence but in different ways. **Open end**: Students use same process to achieve different results.	Students answer the same questions in the same way, within the same time.

10 TOOLS FOR ASSESSING STUDENT PERFORMANCE

Rating scales are marking systems where a symbol (such as 1 to 7) or a mark (such as 5/10 or 50%) is defined in detail. The detail is as important as the coded score. Traditional marking, assessment and evaluation mostly used rating scales without details such as what was right or wrong, weak or strong, etc.

Task lists and **checklists** show the student what needs to be done. These consist of short statements describing the expected performance in a particular task. The statements on the checklist can be ticked off when the student 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. Using rubrics is a different way of assessing 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.

11 SELECTING AND/OR DESIGNING RECORDING AND REPORTING SYSTEMS

The selection or design of recording and reporting systems depends on the purpose of recording and reporting student achievement. **Why** particular information is recorded and **how** it is recorded determine which instrument will be used.

Computer-based systems, for example spreadsheets, are cost and time effective. The recording system should be user-friendly and information should be easily accessed and retrieved.

12 COMPETENCE DESCRIPTIONS

All assessment should award marks to evaluate specific assessment tasks. However, marks should be awarded against rubrics and not be simply a total of ticks for right answers. Rubrics should explain the competence level descriptors for the skills, knowledge, values and attitudes (SKVAs) that a student must demonstrate to achieve each level of the rating scale.

When lecturers or assessors prepare an assessment task or question, they must ensure that the task or question addresses an aspect of a Subject Outcome. The relevant Assessment Standard 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.

13 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:

13.1 Record sheets

The lecturer observes students working in a group. These observations are recorded in a summary table at the end of each project. The lecturer can design a record sheet to observe students' interactive and problem solving skills, attitudes towards group work and involvement in a group activity.

13.2 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.

SECTION C: ASSESSMENT IN WORKSHOP PRACTICE AND ELECTRICAL WORKMANSHIP

1 SCHEDULE OF ASSESSMENT

At NQF levels 2, 3 and 4, lecturers will conduct assessments as well as develop a schedule of formal assessments that will be undertaken in the year. All three levels also have an external examination that accounts for 50 percent of the total mark. The marks allocated to assessment tasks completed during the year, kept or recorded in a PoE account for the other 50 percent.

The PoE and the external assessment include practical and written components. The practical assessment in Workshop Practice and Electrical Workmanship must, where necessary, be subjected to external moderation by Umalusi or an appropriate Education and Training Quality Assurance (ETQA) body, appointed by the Umalusi Council in terms of Section 28(2) of the *General and Further Education and Training Quality Assurance Act, 2001 (Act No. 58 of 2001).*

2 RECORDING AND REPORTING

Workshop Practice and Electrical Workmanship, as is the case for all the other Vocational subjects, is assessed according to five levels of competence. The level descriptions are explained in the following table.

Scale of Achievement for the Vocational component

RATING CODE	RATING	MARKS %
5	Outstanding	80-100
4	Highly competent	70-79
3	Competent	50-69
2	Not yet competent	40-49
1	Not achieved	0-39

The programme of assessment should be recorded in the Lecturer's Portfolio of Assessment for each subject. The following at least should be included in the Lecturer's Assessment Portfolio:

- 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
- A mark sheet and report for each assessment task

The college must standardise these documents.

The student's PoE must include at least:

- A contents page
- The assessment tasks according to the assessment schedule
- The assessment tools or instruments for the task
- A record of the marks (and comments) achieved for each task

Where a task cannot be contained as evidence in the PoE, its exact location must be recorded and it must be readily available for moderation purposes.

ASSESSMENT OF ELECTRICAL WORKMANSHIP

LEVEL 3

3 INTERNAL ASSESSMENT OF SUBJECT OUTCOMES IN ELECTRICAL WORKMANSHIP - LEVEL 3

Topic 1: Trade practices

SUBJECT OUTCOME	
1.1 Know and use standard and acceptable trade practices.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Standard and acceptable trade practices are known and applied effectively.	• List activities to be done by drawing up a tasks list. • Draw up a day/week/month planner for the tasks at hand. • Show in the planning how possible unexpected incidents will influence the work schedule. • State safety, health and environmental requirements applicable to a work-site. • Know about site-specific requirements. • List safety precautions to be taken for identified hazardous working conditions. • List the procedures in reporting an accident. • Know about the Occupational Health and Safety Act of 1993, the Mine Health and Safety Act 29 of 1996, National Occupational Safety Association (NOSA) and NOSA ratings in factories and workshops, and the Safety, Health and Environment (SHE) program. • Select, inspect and use hand tools (saws, files, clamps, screwdrivers, spanners, pliers, hammers, chisels, punches, scribers, rulers and measuring tapes, squares and jigs, electrically insulated tools, wire strippers and cable knife, side cutters, ferrule crimping tools, draw tapes, bending spring and ladders. • Select, inspect and use power tools and power tool attachments (drill bits, hole saws, filing-, grinding-, and cutting-attachments, drilling machines, angle grinding machines, orbital sanders and jig-saws). • Select, inspect and use safety equipment (protective clothing, eyewear, footwear, electrically insulated gloves, welding protection (hood, apron, spats, gloves, barriers), guards and emergency stop switches). • Have basic knowledge of good housekeeping (worksite procedures, safety signs, colour coding of walkways, work-areas, no-go areas and fire-fighting equipment). • Draw up a written plan and organise a schedule for the effective and efficient completion of a task (ordering of equipment, permission to work on equipment, isolation of circuitry, notices and lock-out switches, order in the work area, etc.).

ASSESSMENT TASKS OR ACTIVITIES
Assessment tasks/activities include but are not limited to: • Three tasks are given to the student for the duration of the level 3 subject Electrical Workmanship, namely: 1. Installing and using testing and measuring equipment. 2. Test and Fault Find electrical components and equipment. 3. Install and Commission single phase A.C. machines and control gear. • Before, during and after completion of these tasks, the student must be continuously assessed for the Learning Outcomes mentioned in the trade practices topic (know and use standard and acceptable trade practices). • If the Learning Outcomes mentioned in the trade practices topic cannot be assessed during these three tasks, a written test must be composed that covers the outcomes not assessed during the period. ▪ Example 1: During the "installing and using testing and measuring equipment" task, the student uses hand and power tools to complete the installation. With continuous assessment methods, the student can be assessed in the Learning Outcome "select, inspect and use hand and power tools". ▪ Example 2: If during the entire period of learning, there is no opportunity to assess the student on the Learning Outcome "list the procedures in reporting an accident", a written test must be conducted to assess the student for this outcome. ▪ Example 3: The Learning Outcomes draw up a written plan and organize a schedule for the effective and efficient completion of a task must be internally assessed by the educator. The educator can incorporate this into the three tasks given to the student by including it in the outcomes of each of the three tasks (see the assessment tasks/activities of the three topics below)

Topic 2: Testing and measuring equipment

SUBJECT OUTCOME	
2.1 Using testing and measuring equipment.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic testing and measuring equipment are known and used effectively.	• Demonstrate knowledge of different types and applications of measurement. • Select, inspect, calibrate and use measuring equipment.
ASSESSMENT TASKS OR ACTIVITIES	
Assessment tasks/activities include but are not limited to: • Test the student on the various types, their use of and application of ▪ Ammeters, voltmeters, kW-Hr meters, multimeters, frequency meters, meggers, tong-testers, clamp-meters, stroboscopic tachometers, power factor meters, recorders, etc. • Test the student on: ▪ Maximum expected value for the quantity to be measured. ▪ Most appropriate instrument for the measurement. ▪ Inspect instrument for defects. ▪ Calibrate instrument. ▪ Use instrument.	

SUBJECT OUTCOME	
2.2 Installing testing and measuring equipment.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic testing and measuring equipment are installed in accordance with accepted occupational standards.	• Explain the requirements pertaining to the installation of electrical metering units. • Plan and prepare to install and connect electrical metering units. • Install and connect electrical metering units. • Quality control the installation. • Test the electrical metering unit. • Understand how the electrical metering unit is referenced from circuit diagrams through labelling.

ASSESSMENT TASKS OR ACTIVITIES
• Explain the requirements pertaining to the installation of electrical metering units in a written test. Student must draw up a written plan and organize a schedule for the effective and efficient completion of a task. • Install testing and measuring equipment according to worksite procedures and statutory requirements. • Quality control and complete a quality control inspection list for the installation. • Calibrate and test the instrument for accuracy. • Confirm findings with known values. • Name and label the instrument according to circuit diagrams.

Topic 3: Fault finding and testing

SUBJECT OUTCOME	
3.1 Test and fault find electrical components and equipment.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic testing and fault finding of electrical components and equipment are done in accordance with accepted occupational standards.	• State safety precautions when working on live electrical equipment. • Understand manufacturer's circuit diagrams and specifications. • List the possible tests that can be carried out on the component or equipment. • Testing and fault finding is done in accordance with recognized procedures and practices.
ASSESSMENT TASKS OR ACTIVITIES	
Assessment tasks/activities include but are not limited to: • Student must draw up a written plan and organize a schedule for the effective and efficient completion of a task. • Test student on the ability to interpret manufacturer's circuit diagrams and specifications. • Basic tests such as continuity, open circuit and falling within the acceptable resistance range for the component or equipment. • Student is given typical electrical components and equipment such as switches, isolators, transformers, etc. domestic appliances such as kettles, steam irons, stoves, geysers, fridges and freezers, washing machines and tumble dryers. • Electric power tools such as hand-drills, grinders, orbital sanders and jig-saws.	

Topic 4: Repair and Maintenance

SUBJECT OUTCOME	
4.1 Maintenance of domestic appliances and electric power tools.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic maintenance of domestic appliances and electric power tools is done in accordance with accepted occupational standards.	• List maintenance procedures that can be carried out on domestic appliances and electric power tools. • State criteria for maintenance in accordance with the manufacturer's manual and recognized procedures and practices. • Maintenance is done in accordance with recognized procedures and practices. • The domestic appliance or electric power tool is inspected, tested ad quality assured after maintenance.
ASSESSMENT TASKS OR ACTIVITIES	
Assessment tasks/activities include but are not limited to: • A test is written on possible maintenance procedures that can be carried out on domestic appliances and electric power tools. The student must draw up a written plan and organize a schedule for the effective and efficient completion of a task • Student is given a domestic appliance or electric power tool to maintain. Included is documentation such as the manufacturer's manual. A test is written to determine if the student can list maintenance requirements of the device. • Quality control and complete a quality control inspection list for the maintenance *Range: Loosening, dismantling, replacing, assembling and tightening according to manufacturer's specifications. Replace worn components and parts such as brushes, bushes, bearings, frayed cords and cables, cracked plugs and connectors, etc*.	

SUBJECT OUTCOME	
4.2 Repair of domestic appliances and electric power tools.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic repair of domestic appliances and electric power tools are done in accordance with accepted occupational standards.	• List repair procedures that can be carried out on domestic appliances and electric power tools. • State criteria for repair in accordance with the manufacturer's manual and recognized procedures and practices. • Repair is done in accordance with recognized procedures and practices. • The Domestic Appliance or Electric Power Tool is inspected, tested ad quality assured after repair
ASSESSMENT TASKS OR ACTIVITIES	
Assessment Tasks/Activities include but are not limited to: • A test is written on possible repair procedures that can be carried out on domestic appliances and electric power tools. • Student is given a faulty domestic appliances or electric power tool to repair. Included is documentation such as the manufacturer's manual. A test is written to determine if the student can list repair requirements for the device. • Student is assessed on whether testing and fault finding is done in accordance with recognized procedures and practices. • Student is assessed on the repair process. • Quality control and complete a quality control inspection list for the repair	

Topic 5: Installations

SUBJECT OUTCOME	
5.1 Install single phase AC machines and control gear.	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic installation of single phase ac machines and control gear is done in accordance with accepted occupational standards.	• Plan task and select equipment. • Install single phase AC machines and control gear according to worksite procedures and statutory requirements. • Connect single phase AC machines and control gear.
ASSESSMENT TASKS OR ACTIVITIES	
Assessment Tasks/Activities include but are not limited to: • The student must draw up a written plan and organize a schedule for the effective and efficient completion of the task. A list of requirements (components, tools, instruments, equipment, etc.) must be composed by the student to effectively complete the task. • The student must be able to install small single phase A.C. machines and control gear such as ▪ Induction and universal motors and alternators. ▪ Direct-on-line, sequenced, forward and reverse and auto-transformer control units. • The student must be able to connect small single phase AC machines and control gear mentioned above.	

SUBJECT OUTCOME	
5.2 Commission Single Phase AC Machines and Control Gear	
ASSESSMENT STANDARD	**LEARNING OUTCOME**
• Basic commissioning of single phase AC machines and control gear is done in accordance with accepted occupational standards.	• Commission single phase A.C. machines and control gear according to statutory requirements.
ASSESSMENT TASKS OR ACTIVITIES	
Assessment Tasks/Activities include but are not limited to: • The student must be able to apply commission procedures for small single phase AC machines and control gear mentioned above.	

4 SPECIFICATION FOR EXTERNAL ASSESSMENT IN ELECTRICAL WORKMANSHIP – LEVEL 3

4.1 Integrated summative assessment task (ISAT)

A compulsory component of the external assessment (ESASS) is the **integrated summative assessment task (ISAT)**. The integrated summative assessment task (ISAT) draws on the students' cumulative learning achieved throughout the year. The task requires **integrated application of competence** and is executed and recorded in compliance with assessment conditions.

Two approaches to the integrated summative assessment task (ISAT) may be as follows:

- The students are assigned a task at the beginning of the year which they will have to complete in phases throughout the year to obtain an assessment mark. A final assessment is made at the end of the year when the task is completed.

OR

- Students achieve the competencies throughout the year but the competencies are assessed cumulatively in a single assessment or examination session at the end of the year.

The integrated summative assessment task (ISAT) is set by an externally appointed examiner and is conveyed to colleges in the first quarter of the year.

The integrated assessment approach enables students to be assessed in more than one subject with the same integrated summative assessment task (ISAT).

4.2 National Examination

A National Examination is conducted annually in October or November by means of a paper(s) set and moderated externally. The following distribution of cognitive application is suggested.

LEVEL 3	KNOWLEDGE AND COMPREHENSION	APPLICATION	ANALYSIS, SYNTHESIS AND EVALUATION
	40 - 50%	40 - 50%%	0 - 10%