

Report on the Quality Assurance of the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 assessments and examinations of the DHET



UMALUSI



Council for Quality Assurance in
General and Further Education and Training

**Report on the Quality Assurance of the April 2025
NATED Report 190/191 Engineering Studies N2 - N3
assessments and examinations of the DHET**

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General and Further Education and Training

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INTRODUCTION AND BACKGROUND

The Department of Higher Education and Training (DHET) conducts the NATED Report 190/191 Engineering Studies N2 - N3 examinations three times annually, specifically in April, August, and November. The N2 examinations were administered for the last time in April 2025 due to the phasing out of these programmes during 2025. These examinations are offered at certain public Technical and Vocational Education and Training (TVET) Colleges, private Further Education and Training (FET) Colleges, and select correctional services centres.

Umalusi, as a quality council, is required by the National Qualifications Framework (NQF) and the General and Further Education and Training Quality Assurance (GENFETQA) Act No. 58 of 2001, as amended, to formulate and implement policies and criteria for assessing qualifications within its sub-framework. The NATED Report 191/190 Engineering Studies N1 - N3 is registered by the South African Qualifications Authority (SAQA) as a programme on the Umalusi sub-framework.

As the quality council for general and further education and training, Umalusi:

- a. Must perform the external moderation of assessment, which the various assessment bodies and education institutions implement;
- b. May adjust raw marks during the standardisation process; and
- c. Must, with the concurrence of the Director-General and after consultation with the relevant assessment body or education institution, approve the publication of the results of learners if it is satisfied that the assessment body or education institution has:
 - i. Conducted the assessment free from any irregularity that might jeopardise the integrity of the assessment or its outcomes;
 - ii. Complied with the requirements for conducting assessments prescribed by the Council;
 - iii. Applied the standards prescribed by the Council with which a learner is required to comply to obtain a certificate; and
 - iv. Complied with every other condition determined by the Council.

The mandate of Umalusi is to ensure that the NATED Report 191/190 Engineering Studies N2 - N3 examinations, which are conducted every trimester, are fair, valid, and reliable. To achieve this mandate, Umalusi must ensure that the assessment practices associated with the NATED Report 190/191 Engineering Studies N2 - N3 examinations uphold high-quality standards.

The DHET set all 54 question papers for the April 2025 examinations nationally, and Umalusi externally moderated 25 of the N3 and 25 of the N2 question papers. The DHET distributed question papers via courier to nodal points for collection by examination centres. The answer scripts were then returned to the nodal points within 60 minutes of the examination's completion, as per the regulations.

The DHET instructed the management at both national and provincial marking centres to employ marking personnel who had demonstrated strong performance for the same roles in the November 2024 NATED Report 190/191 examinations.

The DHET followed a decentralised (Regional) marking model for most N2 examinations and a centralised (national) model for most N3 subjects. The N2 marking guidelines were standardised online, after which they were distributed electronically to the marking centres. As in previous examinations, the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations were conducted at various schools, correctional services centres, private colleges, public colleges, and a few centres outside South Africa's borders.

In the past 5 years, the NATED Report 190/191 Engineering Studies N2 - N3 programmes and examinations presented numerous challenges, some of which include, but are not limited to:

- i. Non-compliance with ICASS instructions;
- ii. Late release of the trimester 3 examination results, leading to the late start of trimester 1, was repeatedly reported in the chief markers' reports;
- iii. Candidates with no N1 background; and
- iv. Insufficient time to complete the syllabus adequately.

This report provides feedback on Umalusi's quality assurance of the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations. It includes the summary of findings, areas of improvement in the conduct, administration, and management of these examinations, areas of non-compliance, and directives for compliance and improvement. The findings are drawn from Umalusi's moderation, monitoring, verification, marking concessions, and standardisation processes, along with reports received from the DHET.

This report outlines the quality assurance processes implemented by Umalusi:

- a. Moderation of question papers, Chapter 1;
- b. Moderation of internal continuous assessment, Chapter 2;
- c. Monitoring of the writing of examinations, Chapter 3;
- d. Standardisation of marking guidelines, Chapter 4;
- e. Monitoring of marking centres, Chapter 5;
- f. Verification of marking, Chapter 6; and
- g. Standardisation and resulting, Chapter 7.

ABBREVIATIONS AND ACRONYMS

ASC	Assessment Standards Committee
CD: NEA	Chief Directorate: National Examinations and Assessment
DHET	Department of Higher Education and Training
DMCA	Deputy Marking Centre Manager Academic
EC	Eastern Cape
FET	Further Education and Training
FS	Free State
GP	Gauteng Province
GFETQSF	General and Further Education and Training Qualifications Sub-framework
GENFETQA	General and Further Education and Training Quality Assurance
HOP	Head of Programmes
ID	Identity Document
ICASS	Internal Continuous Assessment
KZN	KwaZulu-Natal
LP	Limpopo
MP	Mpumalanga
NQF	National Qualifications Framework
NW	North West
NC	Northern Cape
OHS	Occupational Health and Safety
PoA	Portfolio of Assessment
PoE	Portfolio of Evidence
SA	South Africa
SACE	South African Council for Educators
SAQA	South African Qualifications Authority
TVET	Technical and Vocational Education and Training
WC	Western Cape

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CHAPTER



MODERATION OF QUESTION PAPERS

1.1 Introduction

Umalusi conducts the external moderation of question papers set nationally and moderated internally by the Department of Higher Education and Training (DHET). The external moderation of examination question papers and marking guidelines ensures that quality and standards are maintained in all NATED Report 190/191 Engineering Studies N2 - N3 examination cycles.

Question paper moderation is a critical component in ensuring the quality of assessment processes. External moderation confirms that the question papers have been meticulously developed and adhere to the Umalusi criteria and the assessment body's curriculum and policy documents.

The DHET is expected to appoint examiners and internal moderators with the requisite content knowledge of the specific instructional offerings to set and internally moderate the question papers before they are

presented to Umalusi for external moderation. The question papers and marking guidelines are expected to be print-ready when submitted to Umalusi for external moderation. Therefore, it remains the responsibility of the internal moderators to ensure that the question papers are of an acceptable standard.

To maintain public confidence in the national examination system, the question papers must be:

- a. Fair;
- b. Reliable;
- c. Representative of an adequate sample of the curriculum;
- d. Representative of relevant conceptual domains; and
- e. Representative of relevant levels of cognitive demand.

1.2 Scope and Approach

The DHET administered 54 instructional offerings for the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations. Umalusi moderated and approved 50 sampled question papers and marking guidelines for these examinations. External moderation was conducted off-site, with question papers, marking guidelines, assessment frameworks, and internal moderators' reports forwarded electronically to the external moderators. The external moderators prepared

assessment frameworks to appraise the cognitive demand and weighting of the syllabi topics and evaluated the question papers in terms of the specified criteria. Umalusi moderated and signed off (approved) the question papers between 17 December 2024 and 03 March 2025.

Table 1A summarises the instructional offerings externally moderated per level.

Table 1A: Instructional offerings included in the moderated sample of question papers

Instructional offering	Level
Aircraft Maintenance Theory	N3
Building and Civil Technology	N3
Building Drawing	N2 and N3
Building Science	N2 and N3
Bricklaying and Plastering Theory	N2
Carpentry and Roofing Theory	N2
Diesel Trade Theory	N2 and N3
Electrical Trade Theory	N2 and N3
Electrotechnology	N3
Engineering Drawing	N2 and N3
Engineering Science	N2 and N3
Fitting and Machining Theory	N2
Industrial Electronics	N2 and N3
Industrial Organisation and Planning	N3
Industrial Orientation	N2 and N3
Instrument Trade Theory	N2 and N3
Logic Systems	N2 and N3
Mathematics	N2 and N3
Mechanotechnology	N3
Motor Electrical Theory	N2
Motor Trade Theory	N2 and N3
Plant Operation Theory	N2 and N3
Platers' Theory	N2
Plating and Structural Steel Drawing	N2 and N3
Plumbing Theory	N2
Radio and Television Theory	N2 and N3
Radio Theory	N2 and N3
Refrigeration Trade Theory	N2 and N3
Supervision in Industry	N3
Waste-Water Treatment Practice	N3
Water and Waste-water Treatment Practice	N2
Water Treatment Practice	N3
Welders' Theory	N2

Table 1B summarises the number of instructional offerings moderated by Umalusi, categorised by level, and their respective percentages.

Table 1B: Number of instructional offerings and percentage

Level	Number of instructional offerings	Number of instructional offerings moderated by Umalusi	Percentage of instructional offerings moderated
N2	29*	25	86%
N3	25*	25	100%
Total	54	50	93%

*According to the DHET 2025 examination timetable

The question papers and marking guidelines were moderated according to the following ten criteria or detailed quality indicators set by Umalusi:

- Technical aspects related to the presentation of the question papers and marking guidelines;
- Effectiveness of internal moderation in improving the quality of question papers;
- Adherence to the syllabus with respect to content coverage;
- Types of questions, formulation of questions, and clarity of questions to achieve the desired response;
- Distribution of marks across cognitive levels;
- Consistency and appropriateness of mark allocation;
- Relevance and correctness of the marking guidelines;
- Appropriateness of language register, correct use of grammar in question papers, and marking guidelines and content that is free of bias;
- Degree of predictability of questions and innovation in question papers; and
- An overall evaluation of the question papers' suitability for the level assessed.

1.3 Summary of Findings

Table 1C summarises the approval status of question papers and marking guidelines after initial moderation.

Table 1C: Approval status of question papers and marking guidelines after initial moderation

Report 190/191 Engineering Studies N2 - N3	April 2025 examinations			
	Number of question papers moderated by Umalusi	Number of question papers approved	Number of question papers conditionally approved	Number of question papers rejected
N2	25	8	16	1
N3	25	8	17	0
Total	50	16	33	1

Figure 1A summarises the approval status of the NATED Report 190/191 Engineering Studies N2 - N3 question papers and marking guidelines after the initial moderation.

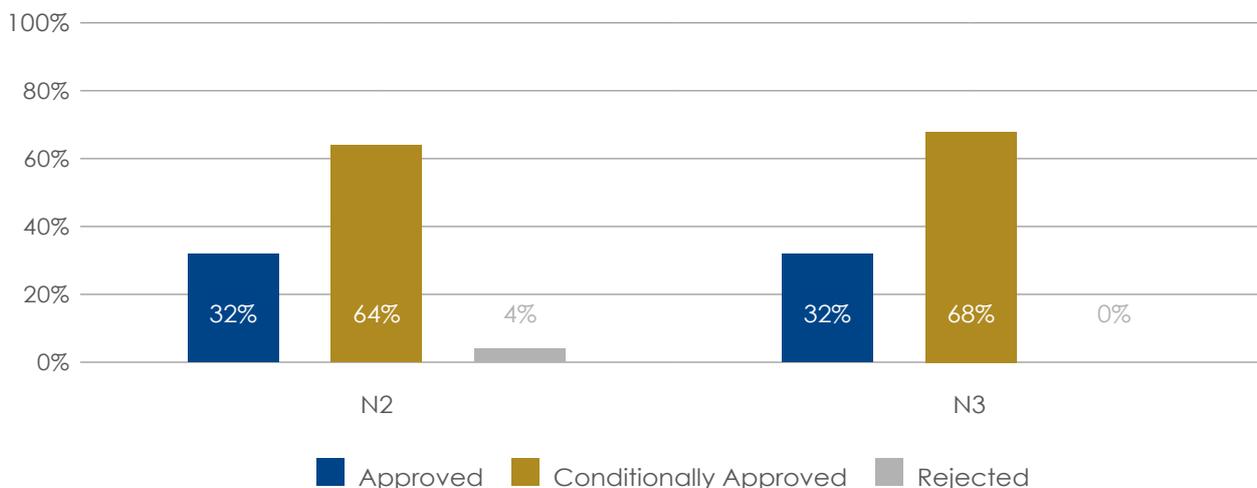


Figure 1A: Approval status of the NATED Report 190/191 Engineering Studies N2 - N3 question papers and marking guidelines after initial moderation

Table 1D below summarises the most significant findings from the moderation of the April 2025 examination question papers and marking guidelines. All findings are discussed in terms of the sample of 50 moderated instructional offerings.

Table 1D: Summary of findings of the initial moderation of question papers

Criterion	Challenges	Instructional offering
Technical Criteria		
Submission of supporting documents to the external moderator	The formula sheet was missing for one instructional offering, a finding similar to that in the April 2024 examinations.	Fitting and Machining Theory N2
Layout of the question paper	The layout of the question paper was acceptable in all the question papers, compared to problems noted in 10% of the papers in the April 2024 examinations.	All instructional offerings
Instructions to candidates	The instructions to candidates required clarification in 2% of the question papers, which is comparable to the previous corresponding examinations.	Engineering Science N2
Numbering of questions	Six percent of the question papers were incorrectly numbered, compared to 2% in the April 2024 examinations.	Engineering Science N3 Industrial Orientation N2 Mathematics N3
Header and footer	It was noted that the headers and footers on each page were consistent and adhered to the required format in 100% of the question papers, equivalent to the April 2024 examinations.	
Font type and size	The fonts were consistently appropriate in 100% of the question papers, the same as in the previous corresponding examinations.	

Criterion	Challenges	Instructional offering
Mark and time allocation	The allocated time for one instructional offering was deemed inadequate for the content. This criterion was flagged as adequate in the April 2024 examinations.	Engineering Drawing N2
	The mark allocation in the question paper and the marking guideline did not correlate in 8% of the question papers, compared to the 4% registered in the April 2024 examinations.	Engineering Science N3 Mathematics N3 Waste-Water Treatment Practice N3 Water and Waste-water Treatment Practice N2
Quality of graphics and illustrations	It was noted that the quality of illustrations, graphs, and figures was poor and unclear, contained errors, and lacked dimensions in 12% of the question papers, compared to 4% in the previous corresponding examinations.	Building Science N3 Carpentry and Roofing Theory N2 Engineering Drawing N2 and N3 Engineering Science N3 Mathematics N3
Format requirements for the syllabus	Two percent of the question papers failed to adhere to the syllabus's prescribed format requirements, which equates to the April 2024 examinations.	Fitting and Machining Theory N2
Internal Moderation		
Internal moderators' reports match the question paper	The internal moderator report in one (2%) instructional offering was blank and did not match the question paper, compared to 10% that did not align in the April 2024 examinations.	Diesel Trade Theory N2
Quality and standard of internal moderation report	It was found that the internal moderator report was incomplete and inappropriate. The report and question paper mismatched in 8% of the question papers, as opposed to the 10% noted in the previous corresponding examinations.	Bricklaying and Plastering Theory N2 Logic Systems N3 Fitting and Machining Theory N2 Waste-Water Treatment Practice N3
	The internal moderation reports failed to identify glaring errors in the question paper, incorrect responses in the marking guidelines, and responses in the marking guidelines that did not align with the question paper in 16% of the question papers, compared to 26% in the April 2024 examinations.	Engineering Drawing N2 and N3 Fitting and Machining Theory N2 Industrial Electronics N2 Mathematics N3 Plating and Structural Steel Drawing N3 Carpentry and Roofing Theory N2 Mechanotechnology N3
	In 18% of the question papers, the question paper did not align with the report; the analysis grid was incomplete, and the analysis grid did not correlate with the question paper, compared to 12% in the previous corresponding examinations.	Aircraft Maintenance Theory N3 Bricklaying and Plastering Theory N2 Diesel Trade Theory N2 and N3 Engineering Drawing N3 Industrial Electronics N3 Logic Systems N2 Mathematics N3 Mechanotechnology N3

Criterion	Challenges	Instructional offering
Content Coverage		
Coverage of the syllabus	Two percent of the question papers contained questions outside the scope of the syllabus, compared to the 6% registered in the April 2024 examinations.	Fitting and Machining Theory N2
	In 2% of the question papers, the questions did not correspond with the prescribed weightings of the topics, as opposed to the 10% noted in the previous corresponding examinations.	Mechanotechnology N3
	Two percent of the question papers reflected an uneven distribution of topics, which equates to the April 2024 examinations.	Mathematics N3
Types and Quality of Questions		
Types of questions	Four percent of the question papers did not include various types of questions, such as multiple-choice, paragraph, data/source-based response, essay, real-life scenario, and real-life problem-solving questions, where applicable, compared to 6% in the April 2024 examinations.	Logic Systems N2 Plating and Structural Steel Drawing N3
	There was no correlation between mark allocation, level of difficulty, and time allocation in 4% of the question papers, compared to the 14% observed in the previous corresponding examinations.	Mathematics N3 Motor Electrical Theory N2
Quality of questions	Eight percent of the questions did not relate to the pertinent aspects of the instructional offerings and were unsolvable, compared to 6% in the April 2024 examinations.	Carpentry and Roofing Theory N2 Engineering Science N3 Mathematics N3 Plating and Structural Steel Drawing N3
	The questions had vaguely defined problems, ambiguous wording, extraneous or irrelevant information, trivia, and inadvertent clues to the correct answers in 18% of the question papers, compared to 10% in the previous corresponding examinations.	Engineering Science N2 Industrial Electronics N3 Motor Trade Theory N2 and N3 Radio and Television Theory N2 and N3 Waste-Water Treatment Practice N3 Water Treatment Practice N3 Water and Waste-water Treatment Practice N2
	In 6% of the question papers, the questions did not provide precise instructional keywords/verbs, compared to 8% in the April 2024 examinations.	Industrial Electronics N3 Waste-Water Treatment Practice N3 Water Treatment Practice N3
	Six percent of the question papers reflected questions that lacked adequate information to elicit appropriate responses, compared to 4% in the previous corresponding examinations.	Logic Systems N3 Mathematics N3 Engineering Drawing N2
	Six percent of the question papers had inadequate multiple-choice options, whereas this aspect was fully compliant in the April 2024 examinations.	Industrial Organization and Planning N3 Logic Systems N2 Motor Trade Theory N3

Criterion	Challenges	Instructional offering
Cognitive Skills		
Analysis grid	The analysis grid did not display the cognitive level of each question or sub-question in 8% of the question papers, compared to the 16% reported in the April 2024 examinations.	Engineering Drawing N3 Logic Systems N2 Mathematics N3 Mechanotechnology N3
	In 6% of the question papers, cognitive levels (Bloom's or other relevant taxonomies) were not appropriately distributed, compared to 12% in the April 2024 examinations.	Carpentry and Roofing Theory N2 Fitting and Machining Theory N2 Mathematics N3
	It was noted that choice questions were not of equal levels of difficulty/standard in 2% of the question papers, compared to 4% in the April 2024 examinations.	Fitting and Machining Theory N2
	In 8% of the question papers, questions failed to meet the cognitive level of instruction. This component was flagged as having met all criteria in the previous corresponding examinations.	Logic Systems N3 Radio and Television Theory N2 and N3 Waste-Water Treatment Practice N3
Assessment of latest developments	All questions were deemed to have been representative of the latest developments in subject knowledge fields, as opposed to 8% in the previous corresponding examination.	
Marking Guidelines		
Accuracy of marking guidelines	Six percent of the marking guidelines did not correspond to the questions in the question papers, compared to the 12% noted in the April 2024 examinations.	Mathematics N3 Industrial Orientation N2 Waste-water Treatment Practice N3
	The answers were inaccurate in 24% of the marking guidelines, compared to the 30% registered in the previous corresponding examinations.	Aircraft Maintenance Theory N3 Engineering Drawing N2 and N3 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N3 Logic Systems N3 Mathematics N3 Radio and Television Theory N2 and N3 Waste-water Treatment Practice N3 Water and Waste-water Treatment Practice N2
	In 8% of the marking guidelines, there was no provision for alternative responses compared to 10% in the April 2024 examinations.	Aircraft Maintenance Theory N3 Building Science N3 Industrial Electronics N2 Radio and Television Theory N3

Criterion	Challenges	Instructional offering
Mark allocation	Ten percent of the marking guidelines did not correspond with the mark allocations on the question papers, compared to four percent in the April 2024 examinations.	Engineering Drawing N2 Mathematics N3 Engineering Science N3 Waste-water Treatment Practice N3 Water and Waste-water Treatment Practice N2
	Twelve percent of the marking guidelines had incomplete mark allocation and distribution in each question, compared to 14% in the previous corresponding examinations.	Engineering Science N3 Industrial Electronics N2 Instrument Trade Theory N2 and N3 Plating and Structural Steel Drawing N2 Waste-water Treatment Practice N3
Language and Bias		
Grammar	The subject terminology/ data was appropriate in all instructional offerings, compared to the 2% noted in the April 2024 examinations.	
	The language register/level and complexity of vocabulary were appropriate for the candidates' level in 100% of the question papers, which equates to the April 2024 examinations.	
	Ten percent of the question papers contained language complexities that might have confused the candidates, which is the same as that of the April 2024 examinations.	Carpentry and Roofing Theory N2 Industrial Electronics N2 Motor Trade Theory N3 Waste-water Treatment Practice N3 Water Treatment Practice N3
	In 10% of the instructional offerings, the language used in the question papers and marking guidelines was grammatically incorrect, which is equivalent to that of the previous examinations.	Industrial Electronics N2 Instrument Trade Theory N2 Waste-water Treatment Practice N3 Water and Waste-water Treatment Practice N2 Water Treatment Practice N3
Predictability		
Repetition of questions from previous examinations	There were questions that could easily be spotted or predicted in 8% of the question papers, compared to 24% in the April 2024 examinations.	Building Science N3 Logic Systems N2 Mathematics N3 Plating and Structural Steel Drawing N3

Criterion	Challenges	Instructional offering
Repetition of questions from previous examinations	Ten percent of the question papers contained questions from examination question papers of the past three years, compared to the 20% noted in the previous corresponding examinations.	Carpentry and Roofing Theory N2 Electrical Trade Theory N2 and N3 Mathematics N3 Radio and Television Theory N2
Innovation	Six percent of the question papers lacked an appropriate degree of originality. This figure was recorded as 12% in the April 2024 examinations.	Logic Systems N2 Mathematics N3 Radio and Television Theory N2
Overall Impression		
Standard of question papers	Two percent of the question papers were not in line with the relevant, current syllabus, compared to the 4% noted in the April 2024 examinations.	Mechanotechnology N3
	In respect of the outcomes of the curriculum/syllabus not being assessed, it was found that 2% of the question papers were non-compliant, as opposed to the 8% recorded in the previous corresponding examinations.	Mathematics N3
	The standard was inappropriate in 12% of the question papers, compared to 22% in the April 2024 examinations.	Carpentry and Roofing Theory N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N3 Radio and Television Theory N2
	Twelve percent of the question papers did not compare favourably with those of previous years' examinations. This figure was found to be 10% in the April 2024 examinations.	Carpentry and Roofing Theory N2 Electrical Trade Theory N3 Fitting and Machining Theory N2 Logic Systems N2 Mathematics N3 Radio and Television Theory N2
	There was insufficient balance in 4% of the question papers on assessing skills, knowledge, attitudes, values, and reasoning, which equates to the April 2024 examinations.	Logic Systems N2 Mathematics N3

During the initial moderation, the question papers were found to be non-compliant in certain aspects. However, after further review and moderation by Umalusi moderators, all the question papers and marking guidelines were subsequently approved.

1.4 Areas of Improvement

The following areas of improvement were observed during the first moderation of question papers in the instructional offerings sampled:

- a. The layout of the question papers was flagged at 100% conformity, thus registering an improvement of 10% from the April 2024 examinations;
- b. Ninety-eight percent of internal moderator reports matched the question paper, as opposed to 90% in the previous corresponding examinations;
- c. The standard of internal moderation was deemed to be satisfactory in 84% of the question papers, marking progress of 8% from the 76% recorded in the previous examinations;
- d. Ninety-four percent of question papers contained an appropriate cognitive level distribution as opposed to 88%;
- e. In 94% of the question papers, there was a correlation between the questions in the question paper and the responses in the marking guideline, marking a 6% increase from the previous year's 88%;
- f. Seventy-six percent of the answers in the marking guideline were accurate as opposed to 70% in the April 2024 examinations; and
- g. Overall, question papers of an appropriate standard were achieved at 88%, representing a 10% improvement from the 78% previously recorded in the April 2024 examinations.

1.5 Areas of Non-Compliance

The Umalusi external moderators' reports revealed the following areas of non-compliance:

- a. In respect of the technical component, there were reports of incorrect numbering in 6% of the question papers as opposed to the previous 2%; there was no correlation in the mark allocation between the question paper and the marking guideline in 8% of the papers compared to the last 4% and the quality of graphs and illustrations continue to remain a challenge in 12% of the papers as opposed to the 4% reported in the April 2024 examinations;
- b. Internal moderators' reports that failed to align with the question papers were pegged at 18%, denoting an increase of 6% from the 12% recorded in the previous corresponding examinations;
- c. There were a range of concerns noted in the criterion question types: eight percent of questions were outside the scope of the syllabus; ambiguous and vague questions were recorded at 18%; questions that lacked adequate information to generate an appropriate response were flagged at 8% and inadequate options for multiple choice questions registered at 6%. These figures show a decline from the April 2024 examination, which ranged from full conformity to 8%;
- d. Questions that did not meet the cognitive level instruction were recorded at 8%, signifying an 8% increase from the total compliance recorded in the previous corresponding examinations;
- e. There was a lack of correlation between the mark allocation in the question paper and the marking guideline in 10% of the papers, reflecting an increase of 6%. The incorrect use of macros was recorded in 2% of the papers, suggesting a 2% increase from the previous examinations; and
- f. Question papers that failed to compare favourably to past examination papers were recorded at 12%, which denotes a 2% increase from the 10% noted in the April 2024 examinations.

1.6 Directives for Compliance and Improvement

Based on the findings in the external moderators' reports, the following directives are issued to improve the quality of question papers and marking guidelines:

The DHET must ensure that:

- a. Appointed personnel take special care to ensure compliance related to all the technical components of the paper, with particular attention focused on the quality of graphs and illustrations;
- b. Examiners and internal moderators are equipped with the necessary skills to complete reports accurately, so there is a correlation between the question paper and the report; and
- c. Question types and cognitive level prescripts are given prompt attention to ensure that the question papers conform to the prescribed norms and standards.

1.7 Conclusion

In respect to some areas of internal moderation, certain aspects of the marking guidelines, and the overall standard of the question papers, it is commendable that improvements by DHET are visible. It is envisaged

that all concerns raised will be addressed to continue striving to maintain standards and fairness in all question papers. The ultimate goal is for all question papers to be approved upon first moderation.

CHAPTER



MODERATION OF INTERNAL CONTINUOUS ASSESSMENT

2.1 Introduction

The moderation of internal continuous assessment (ICASS) is a key quality assurance process used by Umalusi to ensure the consistent application of standards to strengthen the credibility of the examinations. In the NATED Report 190/191 Engineering Studies N2 - N3 programmes, the ICASS contributes 40% towards the final mark for each instructional offering. Umalusi moderated the students' portfolios of evidence (PoE) and the lecturers' portfolios of assessment (PoA) in selected instructional offerings of the April 2025 NATED Report 190/191 N2 and N3 examinations. This external moderation is conducted to verify the quality and standard of ICASS as administered by the Department of Higher Education and Training (DHET).

The main objectives of moderating the internal continuous assessment (ICASS) are to:

- a. Verify that lecturers' PoA adhere to the ICASS guidelines;
- b. Ensure that evidence is competently collected and documented;
- c. Ascertain the appropriateness and standard of the assessment tasks;
- d. Ensure that assessments are consistently delivered across different sites and standards are maintained; and
- e. Ensure that the quality assurance of the internal assessment component of NATED Report 190/191 Engineering Studies N2 - N3 is effectively maintained.

The purpose of this section of the report is to:

- i. Outline the scope and approach followed in the moderation of ICASS;
- ii. Provide an overview of critical findings related to the quality and standard of the ICASS;
- iii. Highlight areas of improvement and those requiring improvement; and
- iv. Issue directives and recommendations for improvement to enhance the quality of internal assessment.

2.2 Scope and Approach

Umalusi external moderators were deployed to six provinces from 25 to 31 March 2025 to moderate the ICASS of N2 and N3 students' and lecturers' portfolios from a sample of NATED Report 190/191 instructional offerings. The external moderators drafted reports on their findings at the sampled sites. Fifteen instructional offerings were sampled for external moderation, which is in line with the fifteen instructional offerings sampled in April 2024. Moderation was conducted at 14 sites (15

in April 2024), of which five (five in April 2024) were at public TVET colleges, eight (nine in April 2024) at private FET colleges, and one (one in April 2024) correctional services centre.

Table 2A summarises information on the sampled instructional offerings, sites and provinces involved in the external moderation of the NATED Report 190/191 Engineering Studies N2 - N3 ICASS during April 2025.

Table 2A: Instructional offerings sampled for the April 2025 ICASS moderation

No.	Instructional offering	College	Campus/site	Province
1.	Bricklaying and Plastering N2	Rustenburg Prison	Rustenburg	NW
2.	Building Drawing N2	Berea Technical College	Durban	KZN
3.	Building Science N2	Divex Edutraincon College	Pretoria	GP
4.	Carpentry and Roofing Theory N2	Denver Technical College of SA	Pretoria	GP
5.	Diesel Trade Theory N2	Advisor Progressive College	Emalahleni	MP
6.	Electrical Trade Theory N2	Port Elizabeth TVET	Iqhayiya	EC
7.	Electrotechnology N3	Thibela Technical College	Emalahleni	MP
8.	Engineering Drawing N2	Umbilo Private Technical College (1)	Durban	KZN
9.	Engineering Science N3	Tshwane South TVET	Pretoria West	GP
10.	Industrial Electronics N2	False Bay TVET	Cape Town	WC
11.	Instrument Trade Theory N2	Umbilo Private Technical College (2)	Durban	KZN
12.	Mathematics N2	Academic Institute of Excellence	Cape Town	WC
13.	Mathematics N3	Westcol TVET	Krugersdorp West	GP
14.	Plating and Structural Steel Drawing N3	Majuba TVET	Newcastle Technology Centre	KZN
15.	Water and Waste-Water Treatment Practice N2	Technicon South Africa for Higher Education	Pretoria	GP

2.3 Summary of Findings

Table 2B summarises the findings reported by the external moderators on the implementation of the ICASS in the Engineering Studies instructional offerings.

Table 2B: Findings observed in the April 2025 moderation of internal continuous assessment

Criterion	Findings	College/Site
Administration	The college provided support at 53% of the sites before enrolment, e.g., competency tests/aptitude tests/ placement tests.	Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education

Criterion	Findings	College/Site
Physical resources	The available facilities at 80% of the sites (a 7% decrease from 87% in April 2024) were sufficient for the number of enrolled students.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Westlake Campus
	The textbooks and teaching materials were available at 93% of the sites when classes commenced at the beginning of the trimester, an increase of 6% compared to 87% in April 2024.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus
	Fifty-three percent of the sites exposed the students to the practical implementation of the subject's theory component at the site of learning, an improvement of 13% compared to 40% in April 2024.	Advisor Progressive College Berea Technical College Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education
	At 67% of the sites, students had access to computers and printers to complete assignments, case studies, and conduct research. This was a 6% decrease from 73% in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Technicon South Africa for Higher Education Westlake Campus
Human Resources	The college had a process in place for identifying the training needs of the staff members at 53% of the sites visited, a 13% increase from the 40% in April 2024.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Iqhayiya Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Westlake Campus

Criterion	Findings	College/Site
Human Resources	The college had a plan for staff training and development at 40% of the sites visited, an increase of 13% from 27% in April 2024.	Berea Technical College Denver Technical College of SA Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Westlake Campus
	There was evidence that the training plan was implemented at 27% of the sites visited, which is consistent with the 27% reported in April 2024.	Denver Technical College of SA Newcastle Technology Centre Campus Pretoria West Campus Westlake Campus
	There were areas where the lecturers felt that they needed further training at 60% of the sites, an increase of 20% from 40% in April 2024.	Academic Institute of Excellence Denver Technical College of SA Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Westlake Campus
	Thirty-three percent of the sites visited exposed the educators to the workplace environment or relevant industry, which is in line with the 33% achieved in April 2024.	Berea Technical College Denver Technical College of SA Newcastle Technology Centre Campus Pretoria West Campus Thibela Technical College
Internal Assessment Policies and Systems	Eighty-seven percent of the sites visited had an up-to-date college assessment policy, a decrease of 6% from the 93% in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus
	There was evidence of a structure or plan for monitoring assessments at the learning site in 67% of the sites visited, a decrease of 6% from the 73% reported in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Westlake Campus

Criterion	Findings	College/Site
Internal Assessment Policies and Systems	There was evidence of an instructional offering monitoring report per lecturer at 80% of the sites visited, an improvement of 7% compared to the 73% in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus
	At 73% of the sites, a plan was in place for developing the assessment tasks, a decrease of 7% from the 80% reported in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) Westlake Campus
	The tasks were developed according to the plan/schedule of the assessment at 60% of the sites, a decrease of 20% compared to 80% in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Newcastle Technology Centre Campus Pretoria West Campus Technicon South Africa for Higher Education Thibela Technical College Westlake Campus
	At 67% (a 26% drop from 93% in April 2024), of sites there were systems in place to ensure tasks were of an acceptable standard.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Thibela Technical College Umbilo Private Technical College (1) Westlake Campus
	The college had an irregularity register at 73% of the sites visited, representing a 13% increase compared to 60% in April 2024.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus

Criterion	Findings	College/Site
Internal Assessment Policies and Systems	Internal assessment irregularities were recorded in the register at 27% (down from 60% in April 2024) of the sites visited.	Berea Technical College Denver Technical College of SA Newcastle Technology Centre Campus Umbilo Private Technical College (2)
Lecturer files	Eighty percent of the sites visited had lecturer files that contained all the following documents: a. Name; b. Certified copies of qualifications; c. SACE registration; d. Teaching/lecturing experience; and e. Workplace experience. This represented a 40% increase from the 40% achieved in April 2024.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) Westlake Campus
	The lecturer's file contained the instructional offering syllabus at 73% of the sites visited, a decrease of 7% compared to 80% in April 2024.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Umbilo Private Technical College (1) Westlake Campus
	The subject file contained lesson plans at 87% of the sites visited, which is on par with the 87% attained in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1)
	The assessment file contained all relevant documents at 87% (80% in April 2024) of the sites visited, namely: a. Assessment schedules; b. Assessment instruments and tools; c. Evidence of pre-assessment moderation; d. Evidence of post-assessment moderation; and e. Mark sheets of all groups.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) Westlake Campus

Criterion	Findings	College/Site
Lecturer files	Assessment scores were accurately recorded on the mark sheet at 93% of the sites visited, representing a 6% increase from the 87% recorded in April 2024.	Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus
Content coverage	Eighty-seven percent of sites (compared to 87% in April 2024) ensured that a satisfactory amount of work had been covered in both tests.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus
	The weighting and spread of content of the topic(s) in both tests was appropriate at 87% (an increase of 7% compared to 80% in April 2024) of the sites.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus
	The type of questions was in line with the stipulated content at 100% of the sites, an increase of 7% from the 93% in April 2024.	

Criterion	Findings	College/Site
Cognitive demand and difficulty levels	The two tasks varied in difficulty, were pitched at the right level, and assessed a variety of knowledge and skills at 87% of the sites, compared to 87% in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus
Internal moderation of tasks	Eighty-seven percent of the sites (a 6% decrease from the 93% in April 2024) had evidence of moderation of marking in both tests of a minimum sample of 10% of the scripts.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) Westlake Campus
	The sample of both tests that were internally moderated included the full range of performances i.e., high, average, and low scoring students at 93% of sites, which is on par with the 93% attained in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus
Technical aspects	The tasks in one hundred percent (87% in April 2024) of the sites contained all relevant information including: <ul style="list-style-type: none"> a. The name of the subject; b. The level of subject; c. Time allocation; d. Content covered; e. Number of tests; and f. Date. 	

Criterion	Findings	College/Site
Technical aspects	Students were clearly instructed on both tasks at 93% of sites visited, a significant increase of 26% from the 67% recorded in the April 2024 findings.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus
	The language and terminology used in both tests were appropriate and relevant at 100% of the sites, compared to 87% in April 2024.	
	The mark allocation was clearly indicated for each question in both tests at 100% of the sites (compared to 80% in April 2024).	
	The mark allocation on the test was the same as that on the marking guideline for both tests at 100% of the sites (compared to 73% in April 2024).	
	The test numbering was correct at 100% of the sites, an increase of 20% from 80% in April 2024.	
	The time allocation was realistic for administering the tests at all (100%) of the sites (a 20% increase from the 80% obtained in April 2024).	
Marking guidelines	The marking guidelines were clear and neatly typed, provided alternative responses where applicable and facilitated marking in both tests at 100% of sites, a significant increase of 40% when compared to 60% in April 2024.	
Student performance	The students interpreted questions correctly and were able to answer all or most of the questions in the tests at 93% of sites, an increase of 6% compared to 87% in April 2024.	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus

Criterion	Findings	College/Site
Quality of marking	Marking was consistent with the marking guidelines at 80% of the sites (compared to the 73% in April 2024).	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus
	The mark allocated accurately reflected the students' performance in both tests at 87% of the sites (compared to 67% in April 2024).	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus
	The totalling of marks and transfer of marks to the mark sheet was accurate at 100% of the sites, an increase of 7% compared to the 93% in April 2024.	
Quality of marking	The quality and standard of marking were acceptable at 80% of the sites.	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Technicon South Africa for Higher Education Thibela Technical College Umbilo Private Technical College (2) Westlake Campus

Criterion	Findings	College/Site
Internal moderation of marking	There was evidence that the students' work had been moderated internally at 93% of the sites (compared to 87% in April 2024).	Academic Institute of Excellence Advisor Progressive College Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Thibela Technical College Umbilo Private Technical College (1) and (2) Westlake Campus
	The quality and standard of internal moderation were acceptable at 73% of sites (compared to 60% in April 2024).	Academic Institute of Excellence Berea Technical College Denver Technical College of SA Divex Edutraincon College Iqhayiya Campus Krugersdorp West Campus Newcastle Technology Centre Campus Pretoria West Campus Rustenburg Prison Thibela Technical College Westlake Campus

Compliance check of additional instructional offerings

External moderators were also requested to conduct compliance checks on documents pertaining to three additional instructional offerings at the sites visited. These additional offerings, totalling 45, were selected from the enrolments received from the DHET for each site. The sites were not informed in advance about the monitoring of these additional instructional offerings. The unannounced requests for evidence of the additional instructional offerings aimed to prevent any suspected window-dressing of the tasks and accompanying documents.

The sites were requested to provide evidence of the additional instructional offerings' marked tests and mark sheets. Table 2C lists the status of the sites visited regarding compliance with the ICASS requirements, as outlined in the 2025 DHET ICASS Instructions.

Table 2C: Evidence of one or both tests accompanied by the marksheet

	College	Campus / Site	Additional Instructional Offerings	Test 1	Test 2	Correct conversion	Enrolments
1.	Academic Institute of Excellence	Cape Town	Electrical Trade Theory N2	✓	✓	✓	14
			Engineering Science N2	✓	✓	✓	18
			Mathematics N3	✓	✓	✓	16
2.	Advisor Progressive College	Witbank	Industrial Electronics N2	✓	✓	✓	81
			Engineering Drawing N2	✓	✓	✓	81
			Engineering Science N2	✓	✓	✓	182
3.	Berea Technical College	Durban	Engineering Science N2	✓	✓	✓	50
			Mathematics N2	✓	✓	✓	45
			Industrial Electronics N2	✓	✓	✓	12
4.	Denver Technical College of SA	Pretoria	Engineering Science N2	✓	✓	✓	831
			Electrical Trade Theory N2	✓	✓	✓	366
			Industrial Electronics N2	✓	✓	✓	362
5.	Divex Edutraincon College	Pretoria	Engineering Science N2	x	x	x	41
			Mathematics N2	x	x	x	47
			Electrical Trade Theory N2	x	x	x	16
6.	False Bay TVET	Westlake Campus	Mechanotechnology N3	✓	✓	✓	18
			Engineering Science N3	✓	✓	✓	23
			Mathematics N2	✓	✓	✓	47
7.	Majuba TVET	Newcastle Technology Centre	Industrial Electronics N3	✓	✓	✓	124
			Engineering Science N3	✓	✓	✓	318
			Mathematics N3	✓	✓	✓	321
8.	Port Elizabeth TVET	Iqhayiya Campus	Industrial Electronics N2	✓	✓	✓	30
			Mathematics N2	✓	✓	✓	47
			Engineering Science N2	✓	✓	✓	34
9.	Rustenburg Prison	Rustenburg	Engineering Science N2	x	x	x	11
			Mathematics N2	✓	✓	✓	17
			Industrial Electronics N2	✓	✓	✓	10

	College	Campus / Site	Additional Instructional Offerings	Test 1	Test 2	Correct conversion	Enrolments
10.	Technicon South Africa for Higher Education	Pretoria	Mathematics N2	✓	✓	✓	66
			Engineering Science N2	✓	✓	✓	62
			Engineering Drawing N2	✓	✓	✓	34
11.	Tshwane South TVET	Pretoria West	Mathematics N3	✓	✓	✓	105
			Engineering Drawing N3	✓	✓	✓	23
			Industrial Electronics N3	✓	✓	✓	25
12.	Thibela Technical College	Emalaheni	Industrial Electronics N2	✓	✓	✓	53
			Engineering Science N3	✓	✓	✓	104
			Mathematics N2	✓	✓	✓	130
13.	Umbilo Private Technical College	Durban	Electrical Trade Theory N2	✓	✓	✓	125
			Engineering Science N3	✓	✓	✓	81
			Engineering Drawing N3	✓	✓	✓	48
14.	Umbilo Private Technical College	Durban	Industrial Electronics N2	✓	✓	✓	102
			Fitting & Machining Theory N2	✓	✓	✓	95
			Mechanotechnology N3	✓	✓	✓	47
15.	Westcol TVET	Krugersdorp Campus (Engineering)	Industrial Electronics N3	✓	✓	✓	31
			Engineering Drawing N3	✓	✓	✓	23
			Engineering Science N3	✓	✓	✓	23

Two sites experienced challenges with the sampled instructional offerings, including non-compliance with marked tests and mark sheets requirements. The sites that faced challenges in complying with the ICASS requirements, as per the 2025 DHET ICASS Instructions, are listed in Table 2D.

Table 2D: The sites that experienced challenges in terms of ICASS compliance

Evidence of additional Instructional Offerings	College and Campus	Instructional Offering
No students' POE was submitted for verification. <i>(Only enrolment statistics could be provided as part of the evidence)</i>	Divex Edutraincon College (Pretoria)	Engineering Science N2 Mathematics N2 Electrical Trade Theory N2
No students' POEs were submitted for verification, and there was no access to the files. <i>(Only enrolment statistics could be provided as part of the evidence)</i>	Rustenburg Prison (Rustenburg)	Engineering Science N2

2.5 Areas of Improvement

The following improvements were observed:

- a. The textbooks/teaching material at 93% of the sites, were available when the classes commenced at the beginning of the trimester, an increase of 6% compared to 87% in April 2024;
- b. There was evidence of an instructional offering monitoring report per lecturer at 80% of the sites visited, an improvement of 7% compared to the 73% in April 2024;
- c. Eighty percent of the sites visited had lecturer files that contained all the required documents, which was an increase of 40% from the 40% attained in April 2024;
- d. The assessment file contained all relevant documents at 87% (80% in April 2024) of the sites visited;
- e. The weighting and spread of content of the topic(s) in both tests were appropriate at 87% (an increase of 7% compared to 80% in April 2024) of the sites;
- f. There were clear instructions to students on both tasks at 93% of sites visited, a significant increase of 26% from the 67% in April 2024 findings;
- g. The mark allocation was clearly indicated for each question in both tests at 100% of the sites, compared to 80% in April 2024;
- h. The mark allocation on the test was the same as that on the marking guideline for both tests at 100% of the sites (compared to 73% in April 2024);
- i. The marking guidelines were clear and neatly typed, provided alternative responses where applicable and facilitated marking in both tests at 100% of sites, a significant increase of 40% when compared to 60% in April 2024;
- j. Marking was consistent with the marking guidelines at 80% of the sites (compared to the 73% in April 2024); and
- k. The mark allocated was an accurate reflection of the students' performance in both tests at 87% of the sites, compared to 67% in April 2024.

2.6 Areas of Non-compliance

In April 2025, non-compliance was noted in the following:

- a. The available facilities at 80% (a 7% decrease compared to 87% in April 2024) of the sites were sufficient for the number of enrolled students;
- b. There were computers and printers for the students at 67% of the sites to complete assignments/case studies and conduct research. This was a 6% decrease from 73% in April 2024;
- c. There was an up-to-date college assessment policy at 87% of the sites visited, a decrease of 6% from the 93% in April 2024;
- d. There was a plan in place for the development of the assessment tasks at 73% (80% in April 2024) of the sites;
- e. The tasks were developed according to the plan/schedule of assessment at 60% (80% in April 2024) of the sites;
- f. At 67% (93% in April 2024) of the sites, there were systems in place to ensure that tasks were of an acceptable standard;
- g. The lecturer file contained the instructional offering syllabus at 73% of the sites visited compared to 80% in April 2024; and
- h. Eighty-seven percent of the sites (93% in April 2024) had evidence of the moderation of marking in both tests of a minimum sample of 10% of the scripts.

2.7 Directives for Compliance and Improvement

The DHET must address the following directives for compliance and improvement to ensure effective teaching, learning, and assessment of the Engineering Studies' instructional offerings at the colleges by ensuring that:

- a. There is an up-to-date college assessment policy;
- b. There is a plan for developing the assessment tasks;
- c. There are systems in place to ensure that developed tasks meet acceptable standards;
- d. The lecturer's file contains a syllabus;
- e. A detailed schedule for the development of tasks is prepared; and
- f. Evidence of marking and internal moderation for both tests is available.

2.8 Conclusion

The NATED Report 190/191 Engineering Studies N2 - N3 programmes are currently being phased out during the 2025 academic year at private FET and public TVET colleges. The high standard of internal assessments for this programme must be strictly maintained. Although knowledge of the theory of instructional offerings is gained, the practical application of the theoretical

components is crucial for preparing students for the industry. ICASS plays a pivotal role in ensuring students are well-prepared for the final examination. Therefore, the DHET must continuously monitor the implementation of ICASS at teaching and learning sites to ensure the holistic development of students, equipping them for the workplace and/or further studies.

CHAPTER



MONITORING OF THE WRITING OF EXAMINATIONS

3.1 Introduction

The purpose of Umalusi monitoring the writing of examinations is to determine whether the Department of Higher Education and Training (DHET) conducts, administers, and manages the examinations in accordance with approved guidelines and policies. Monitoring ensures the credibility of examinations for the Technical and Vocational Education and Training (TVET) qualifications and programmes registered on the General and Further Education and Training

Qualifications Sub-framework (GFETQSF) offered at TVET colleges.

This chapter reports on the findings from monitoring a sample of 35 examination centres nationally. It also acknowledges areas of improvement and non-compliance and provides directives for improvements and compliance.

3.2 Scope and Approach

Umalusi selected 35 examination centres from eight of the nine provinces to monitor the writing of the April 2025 national examinations of NATED Report 190/191 Engineering Studies N2 - N3. The sample included 16 public examination centres, 18 private examination

centres, and one correctional services centre. Umalusi collected data from the selected sites through verification, observation, and interview methods. Reports were generated from the data collected at the selected examination centres.

The details of the examination centres monitored are provided in Table 3A.

Table 3A: Examination centres monitored by Umalusi staff and monitors

No.	Name of college and type	Site/Campus	Province	Subject/s	Date visited
1.	ABM College SA (Private)	Secunda	MP	Electro-technology N3 and Engineering Drawing N2	14/04/2025
2.	Advisor Progressive College (Private)	Witbank	MP	Diesel Trade Theory N2	01/04/2025
3.	Berea Technical College (Private)	Durban	KZN	Mathematics N2	26/03/2025
4.	Better Best Projects (Private)	Mokopane	LP	Mathematics N2	26/03/2025
5.	Brooklyn City College (Private)	Nelspruit	MP	Engineering Science N2 and Mathematics N3	31/03/2025
6.	Buffalo City TVET (Public)	Saint Marks	EC	Mathematics N2	26/03/2025
7.	Capricorn TVET (Public)	Seshego	LP	Building Drawing N3	04/04/2025

No.	Name of college and type	Site/Campus	Province	Subject/s	Date visited
8.	Central Johannesburg College TVET (Public)	Alexandra	GP	Motor Trade Theory N3	03/04/2025
9.	Coastal KZN TVET (Public)	Swinton Road	KZN	Engineering Drawing N3	07/04/2025
10.	College of Cape Town TVET (Public)	Pinelands	WC	Engineering Science N2 and Mathematics N3	31/03/2025
11.	Denver Technical College (Private)	Pretoria	GP	Plating and Structural Steel Drawing N2	10/04/2025
12.	False Bay TVET (Public)	Westlake	WC	Electrical Trade Theory N2 and Engineering Drawing N3	07/04/2025
13.	Future Success Skills (Private)	Witbank	MP	Supervision in Industry N3	10/04/2025
14.	Goldfields TVET (Public)	Tosa	FS	Industrial Electronics N3	27/03/2025
15.	Jane Furse City College (Private)	Jane Furse Centre	LP	Mathematics N2	26/03/2025
16.	Jeppe College of Commerce and Computer Studies (Private)	Bloemfontein	FS	Mathematics N3	31/03/2025
17.	Letaba TVET (Public)	Giyani	LP	Electro-technology N3	14/04/2025
18.	Motheo TVET (Public)	Thaba Nchu	FS	Building Science N3 and Engineering Science N3	28/03/2025
19.	Motheo TVET (Public)	Hillside View	FS	Building Drawing N3	04/04/2025
20.	Nkangala Training Centre (Private)	Middleburg	MP	Engineering Science N3	28/03/2025
21.	Northlink TVET (Public)	Goodwood	WC	Engineering Science N3	28/03/2025
22.	Polokwane Technology Institute (Private)	Polokwane	LP	Supervision in Industry N3 and Waste-Water Treatment Practice N3	10/04/2025
23.	Progressive Advisor College (Private)	Emalahleni	MP	Plating and Structural Steel Drawing N2	10/04/2025
24.	Rostec Technical College (Private)	Polokwane	LP	Mathematics N2	26/03/2025
25.	Saint Ignatius College (Private)	Witbank	MP	Plating and Structural Steel Drawing N2	10/04/2025
26.	Shakaland Technical College (Private)	Stanger	KZN	Electro-technology N3 and Engineering Drawing N2	14/04/2025
27.	South West Gauteng TVET (Public)	Molapo	GP	Building Drawing N3	04/04/2025
28.	South West Gauteng TVET (Public)	Roodepoort West	GP	Electro-technology N3	14/04/2025

No.	Name of college and type	Site/Campus	Province	Subject/s	Date visited
29.	Taletso TVET (Public)	Mafikeng	NW	Building Drawing N3	04/04/2025
30.	Thekwini TVET (Public)	Melbourne	KZN	Mathematics N3	31/03/2025
31.	Tshwane South TVET (Public)	Centurion	GP	Diesel Trade Theory N2	01/04/2025
32.	Umbilo Private Technical (Private)	Durban	KZN	Electrical Trade Theory N2	07/04/2025
33.	Watersrand College (Private)	Newcastle	KZN	Industrial Organisation and Planning N3	15/04/2025
34.	White River Technical College (Private)	White River	MP	Building Science N3 and Engineering Science N3	28/03/2025
35.	Witbank Correctional Services	Witbank	MP	Engineering Science N2 and Mathematics N3	31/03/2025

3.3 Summary of Findings

The findings on monitoring the writing of the examination are indicated in Table 3B, below, by criteria, as per the Umalusi monitoring of the writing of the examination instrument.

Table 3B: Detailed findings at monitored examination centres

Criteria	Findings	Examination centres
Preparations for the examination	Umalusi noted evidence that the DHET had verified the state of readiness and availability of facilities at 27 (77%) of the examination centres visited. This was a 7% decrease from the 84% in the April 2024 examinations.	
	In eight (23%) of the examination centres monitored, there was no proof that DHET had verified the centre.	Future Success Skills Giyani Campus Hillside View Campus Jeppe College of Commerce and Computer Studies Mafikeng Campus Nkangala Training Centre Progressive Advisor College Seshego Campus
	There was an official timetable for the current examinations at 34 (97%) of the monitored 35 examination centres, an increase of 5% compared to 92% in the April 2024 examinations.	
	There was no official timetable for the current examinations at one (3%) of the monitored examination centres.	Watersrand College

Criteria	Findings	Examination centres
Preparations for the examination	Thirty-four (97%) examination centres had sufficient examination rooms to accommodate all registered candidates, a decrease of 3% compared to 100% in the April 2024 examinations.	
	One (3%) examination centre did not have enough examination rooms to accommodate all the registered candidates.	Jane Furse City College
	The examination rooms at 31 (89%) of the 35 examination centres had sufficient space to accommodate all candidates. This allowed candidates to be seated at one metre distance apart (in all directions). This was 3% lower than the 92% recorded in April 2024 examinations.	
	At four (11%) examination centres, candidates were seated less than one metre apart from each other in all directions.	Advisor Progressive College Hillside View Campus Jeppe College of Commerce and Computer Studies Thaba Nchu Campus
	Sufficient and suitable furniture was provided at 35 (100%) of the centres monitored, which was on par with the 100% reported in the April 2024 examinations.	
	There was suitable lighting in the examination rooms at 28 (80%) of the monitored examination centres. This represented a 12% decrease from the 92% achieved in the April 2024 examinations.	
	At seven (20%) examination centres, there was no proper lighting in the examination rooms.	Alexandra Campus Future Success Skills Hillside View Campus Mafikeng Campus Melbourne Campus Thaba Nchu Campus Tosa Campus
	Thirty-four (97%) examination centres had access to water and sanitation, a 3% decrease from the 100% achieved in the April 2024 examinations.	
	At one (3%) examination centre, there was no water due to the local municipality's challenges.	Melbourne Campus
	Thirty (86%) examination centres had a venue assigned for the storage of bags.	
At five (14%) examination centres, no venue was assigned for the storage of bags.	ABM College SA Denver Technical College Nkangala Training Centre Progressive Advisor College Swinton Road Campus	

Criteria	Findings	Examination centres
Preparations for the examination	Thirty-four (97%) examination centres had a safe or strong room where examination materials were stored, a 3% decrease from the 100% in April 2024 examinations.	
	At one (3%) examination centre, examination materials were not stored in a secure room.	Nkangala Training Centre
	The environment was conducive for writing examinations at 32 (91%) of the 35 examination centres. This was a 9% decrease compared to the 100% in April 2024 examinations.	
	At three (9%) examination centres, the environment was not conducive for the writing of examinations.	Brooklyn City College Mafikeng Campus Tosa Campus
	Thirty-one (89%) examination centres had a backup generator.	
	At four (11%) examination centres, there was no backup generator on site.	Brooklyn City College Denver Technical College Swinton Road Campus Witbank Correctional Services
	Chief invigilators from all examination centres received/collected question papers from the nodal point. This was a 4% increase compared with the 96% attained in April 2024 examinations.	
	At all monitored examination centres, the chief invigilator or authorised personnel received the examination materials from the assessment body.	
	The chief invigilators verified that the correct question papers were delivered/collected at all examination centres.	
	An updated stock control register was kept at 32 (91%) examination centres; a decrease of 5% compared to 96% in April 2024 examinations.	
	The stock control register was not available at three (9%) of the monitored examination centres.	ABM College SA Denver Technical College Nkangala Training Centre
Invigilators and their training	Campus managers were appointed as chief invigilators at 33 (94%) examination centres monitored; this was a 2% decrease compared to 96% in April 2024 examinations.	
	Two (6%) examination centres did not comply, as there was no evidence of an appointment letter/s.	Nkangala Training Centre Shakaland Technical College
	The DHET trained chief invigilators at 34 (97%) of the 35 examination centres, a 5% increase from 92% in the April 2024 examinations.	
	There was no evidence that the assessment body had trained the chief invigilator at one examination centre.	Nkangala Training Centre

Criteria	Findings	Examination centres
Invigilators and their training	Invigilators were appointed in writing at 33 (94%) examination centres; a decrease of 6% compared to 100% in April 2024 examinations.	
	At two (6%) of the monitored examination centres, invigilators were not appointed in writing.	Berea Technical College Nkangala Training Centre
	Invigilators at 33 (94%) of the 35 examination centres had received training for the current examination; a decrease of 6% compared to 100% in the April 2024 examinations.	
	At two (6%) examination centres, invigilators were not trained for the current examination.	Nkangala Training Centre Mafikeng Campus
Preparations for and examination rooms	At thirty-four (97%) of the monitored examination centres, candidates were seated by 08:30 AM, 30 minutes before the examination commenced; an increase of 5% compared to 92% in the April 2024 examinations.	
	At one (3%) examination centre monitored, candidates were not seated 30 minutes prior to the examination commencing.	Roodepoort West Campus
	The total number of examination centres, where invigilators verified candidates' admission letters/identity documents before they were allowed into the examination venue, was 35 (100%). This was on par with the findings of 100% in the April 2024 examinations.	
	There was an appropriate number of invigilators at 34 (97%) of the examination centres monitored. This was a 1% increase compared to the 96% in April 2024 examinations.	
	At one (3%) examination centre monitored, the number of invigilators was not appropriate.	Jeppe College of Commerce and Computer Studies
	There was an invigilation timetable at 33 (94%) examination centres; a considerable increase of 10% when compared to the 84% in the April 2024 examinations.	
	At two (6%) examination centres, there was no invigilation timetable.	ABM College SA Future Success Skills
	Twenty-five (71%) examination centres had relief timetables, which is 9% less than the 80% attained in the April 2024 examinations.	
At ten (29%) examination centres, there was no relief timetable.	ABM College SA Better Best Projects Denver Technical College Future Success Skills Jane Furse City College Nkangala Training Centre Progressive Advisor College Saint Marks Campus Thaba Nchu Campus Watersrand College	

Criteria	Findings	Examination centres
Preparations for and examination rooms	Invigilators at 32 (91%) examination centres signed an attendance register, a slight decrease of 1% compared with the 92% in the April 2024 examinations.	
	At three (9%) examination centres, the attendance register of invigilators was not signed.	Jane Furse City College Mafikeng Campus Nkangala Training Centre
	At 31 (89%) examination centres, candidates were seated according to a seating plan; an improvement of 1% when compared to 88% in April 2024 examinations.	
	At four (11%) examination centres, candidates were not seated according to a seating plan.	ABM College SA Centurion Campus Denver Technical College Watersrand College
	A clock or another device displaying the time was clearly displayed at 35 (100%) of the examination centres monitored, which is on par with the 100% in April 2024 examinations.	
	An information board was visible at 34 (97%) examination centres, a 5% improvement over the findings of 92% in April 2024 examinations.	
	At one (3%) of the monitored examination centres, there was no information board.	Thaba Nchu Campus
	The examination venue/s /s at 35 (100%) monitored examination centres/sites were free of any material/ writing/drawings that could aid candidates in writing the examination, which is on par with the 100% in April 2024 examinations.	
	Invigilators at 35 (100%) examination centres monitored candidates and ensured that they were not in possession of cell phones or any materials/equipment not required for the examination, an increase of 4% compared to 96% in the April 2024 examinations.	
	Invigilators at 34 (97%) examination centres monitored and checked calculators for compliance, where applicable, an increase of 17% compared to 80% in April 2024 examinations.	
At one (3%) examination centre, calculators were not checked for compliance.	Hillside View Campus	
The examination file was available in the examination room at 35 (100%) examination centres.		
Time management	Invigilators arrived on time at 35 (100%) examination centres, which is on par with the 100% attained in April 2024.	
	Candidates signed attendance registers at all examination centres, which is on par with 100% in the April 2024 examinations.	
	Invigilators issued the official answer book to all candidates writing the examination, which is the same as 100% in the April 2024 examinations.	

Criteria	Findings	Examination centres
Time management	Invigilators at 34 (97%) examination centres verified that the information on the cover page of answer books was correct. This rating was 3% less than the 100% in April 2024 examinations.	
	Invigilators at one (3%) examination centre did not verify information on the cover page of answer books.	Saint Ignatius College
	The sealed question papers were opened in the presence of candidates at 33 (94%) examination centres, which was on par with the 94% attained in the April 2024 examinations.	
	At two (6%) of the examination centres monitored, the question papers were not opened in front of the candidates.	Mafikeng Campus Molapo Campus
	Question papers were distributed to candidates on time at 30 (86%) examination centres, a decrease of 6% compared to 92% in the April 2024 examinations.	
	At five (14%) of the examination centres monitored, question papers were not distributed to candidates on time.	Molapo Campus (09:05) Roodepoort West Campus (09:15) Saint Ignatius College (08:53) Saint Marks Campus (09:05) Swinton Road Campus (09:30)
	Invigilators at 34 (97%) examination centres monitored and checked question papers for technical accuracy, an increase of 13% compared to the 84% in April 2024 examinations.	
	Invigilators at one (3%) examination centre did not check question papers for technical accuracy.	Advisor Progressive College
	Candidates were given the required reading time at 32 (91%) examination centres, a slight decrease of 1% compared to 92% in the April 2024 examinations.	
	At three (9%) of the monitored examination centres, candidates had to start writing the examination without being given the required regulated reading time to read the question papers.	Centurion Campus (4 minutes) Saint Ignatius College (5 minutes) Swinton Road Campus (0 minutes)
Examination rules were read to candidates at 34 (97%) of the examination centres; a decrease of 3% in compliance compared to the 100% in the April 2024 examinations.		
At one (3%) examination centre, the invigilators did not read the examination rules to candidates.	Alexandra Campus	

Criteria	Findings	Examination centres	
Time management	The examination started at the time indicated on the timetable at 30 (86%) examination centres; a decrease of 6% compared to 92% in the April 2024 examinations.		
	At five (14%) examination centres, the examination did not start at the time indicated on the timetable.	ABM College SA (09:10) Molapo Campus (09:23) Roodepoort West Campus (09:15) Saint Marks Campus (09:15) Swinton Road Campus (09:30)	
	Candidates at 34 (97%) examination centres arrived within the stipulated time and were admitted to the examination rooms.		
	At one (3%) examination centre, candidates did not arrive within the stipulated time.	Swinton Road Campus	
	Invigilators stamped the answer books at 35 (100%) examination centres, an increase of 4% compared to the 96% in April 2024 examinations.		
	The examination ended at the stipulated time at 30 (86%) examination centres, which was 6% lower than the 92% achieved in April 2024 examinations.		
	At one (3%) examination centre, the candidates finished the examination early, so it ended before the stipulated time.	Alexandra Campus (10:55)	
	At four (11%) examination centres, the examination ended later than the stipulated time.	Molapo Campus (13:23) Roodepoort West Campus (12:30) Saint Marks Campus (12:15) Swinton Road Campus (13:30)	
	Activities during writing	At 34 (97%) examination centres, no candidates left the examination room temporarily without an escort during the examination sessions. This represents a 5% increase compared to the 92% achieved in the April 2024 examinations.	
		At one (3%) examination centre, a candidate left the examination room temporarily without an escort during the examination session.	Nkangala Training Centre
There were no unauthorised personnel in any of the examination rooms at 33 (94%) examination centres, a decrease of 6% compared to 100% in April 2024 examinations.			
At two (6%) examination centres, unauthorised personnel were present in the examination venue.		Saint Marks Campus Future Success Skills	
Officials at 34 (97%) examination centres did not allow candidates to leave the examination room during the last 15 minutes of the session, a 1% increase from 96% in the April 2024 examination.			
At one (3%) examination centre, candidates were allowed to leave the examination room in the last 15 minutes.		Nkangala Training Centre	

Criteria	Findings	Examination centres
Activities during writing	There were no irregularities reported during the examination session at 30 (86%) of the 86 examination centres: a decrease of 6% compared to 92% in the April 2024 examinations.	
	At five (14%) examination centres, irregularities were reported.	Hillside View Campus Mafikeng Campus Melbourne Campus Molapo Campus Swinton Road Campus
	Invigilators at 34 (97%) examination centres were active, mobile, and vigilant throughout the examination. This represented a 5% increase from the 92% reported in April 2024 examinations.	
	At one (3%) examination centre, an invigilator remained seated and engaged in other activities (e.g., counting examination booklets).	Saint Marks Campus
Packaging and transport of answer scripts	Scripts were counted and packed in a secure area at 34 (97%) examination centres, a decrease of 3% compared to 100% in April 2024 examinations.	
	At one (3%) examination centre, scripts were not counted and packed in a secure area.	Future Success Skills
	At 33 (94%) examination centres monitored, absentee forms were inserted into the batches of scripts at the venue where the examination was conducted, a 6% decrease from the 100% attained in April 2024 examinations.	
	At two (6%) examination centres, absentee forms were not inserted into the batches of scripts at the venue where the examination was conducted.	Centurion Campus Mafikeng Campus
	Only authorised personnel were present during the packing of scripts at 34 (97%) examination centres, a decrease of 3% compared to 100% in April 2024 examinations.	
	At one (3%) examination centre monitored, the packaging was conducted only by the college director in their office.	Future Success Skills
	At 34 (97%) examination centres, the scripts were packaged in the sequence on the mark sheet, which is 3% less than the 100% attained in April 2024 examinations.	
	At one (3%) examination centre monitored, there was no evidence that scripts were packaged in the sequence on the mark sheet.	Future Success Skills
	At 34 (97%) examination centres, the number of scripts corresponded to the number on the wrapper, which is 3% less than the 100% in April 2024 examinations.	
	At one (3%) examination centre monitored, there was no evidence that the number of scripts corresponded to the number on the wrapper.	Future Success Skills

Criteria	Findings	Examination centres
Packaging and transport of answer scripts	Examination officials at 34 (97%) examination centres sealed the scripts in the satchel provided, which is 3% less than the 100% in the April 2024 examinations.	
	At one (3%) examination centre monitored; there was no evidence that the scripts were sealed in a provided satchel.	Future Success Skills
	The scripts were sealed in the presence of the monitor at 34 (97%) of the examination centres monitored, a 3% decrease compared to 100% in April 2024 examinations.	
	At one (3%) examination centre, the scripts were not sealed in the presence of the monitor.	Future Success Skills
	The chief invigilators at 26 (74%) of the examination centres completed a daily situational report, an 18% decrease from 92% in April 2024 examinations.	
	Monitors did not observe evidence that the chief invigilator completed a daily situational report at nine (26%) examination centres.	Berea Technical College Denver Technical College Future Success Skills Melbourne Campus Molapo Campus Nkangala Training Centre Progressive Advisor College Swinton Road Campus Westlake Campus
	Authorised personnel either locked scripts away or transported them to a nodal point at 35 (100%) examination centres. Similar to 100% of the April 2024 examination.	
Monitoring by the DHET	Twenty-three (66%) examination centres could provide evidence of monitoring by the DHET, representing a 2% decrease from the 68% reported in April 2024 examinations.	
	At 12 (34%) examination centres, there was no evidence that the assessment body had monitored the examination centre's state of readiness for the examination.	ABM College SA Berea Technical College Centurion Campus Giyani Campus Jeppe College of Commerce and Computer Studies Mafikeng Campus Molapo Campus Nkangala Training Centre Roodepoort West Campus Thaba Nchu Campus Tosa Campus Umbilo Private Technical

3.3.1 Irregularities and Incidents Identified by Umalusi

Umalusi noted the following irregularities and incidents at examination centres:

a. ABM College SA (Secunda):

- i. There were no invigilation and relief timetables;
- ii. There was no seating plan for the candidates, and
- iii. Some of the Electro-technology N3 candidates started to write the examination ten minutes late (09:10) because of the shortage of question papers.

b. Berea Technical College (Durban):

- i. Invigilators were not officially appointed for this examination cycle.

c. Brooklyn City College (Nelspruit):

- i. The examination venue is on the second floor, and noise from cars, trucks, and pedestrians on the street below was concerning and distracting.

d. Buffalo City TVET College (Saint Marks Campus):

- i. The question papers were handed to candidates late;
- ii. The examination was not started on time;
- iii. The examination ended later than the stipulated time; and
- iv. The Head of Programmes (HOP) entered (09:02 – 09:07) the examination venue unauthorised.

e. Coastal TVET College (Swinton Road Campus):

- i. The DHET supplied the examination centre with insufficient question papers (25 instead of 133); therefore, 108 question papers were photocopied for the candidates, and this caused the examination to start 30 minutes late and finish 30 minutes late;
- ii. Candidates were not given regulated reading time, and
- iii. Four candidates were allowed to write the examination without producing the Identity Document.

f. Nkangala Training Centre (Middleburg):

- i. Examination material was not stored in a safe/strong room;
- ii. The Principal/Campus Manager was not appointed as the Chief Invigilator;
- iii. The Chief Invigilator did not attend the training conducted by the assessment body;

- iv. All Invigilators were not appointed in writing by the Chief Invigilator; and
- v. None of the invigilators were trained for the current examination.

g. South West Gauteng TVET College (Molapo Campus):

- i. Question papers were not opened in front of the candidates, and
- ii. The DHET supplied the examination centre with insufficient question papers, so question papers were photocopied for the candidates, which caused the examination to start 23 minutes late and finish 23 minutes late.

h. Taletso TVET College (Mafikeng Campus):

- i. Thirty question papers were delivered to the examination centre and there were 127 candidates. The examination officer contacted DHET, and it was indicated that they can print more papers due to an error in the system. The question papers were opened and copied in the morning before the session. The copies were sealed again and taken to the venue. The candidates verified the sealed bag from the college, and
- ii. Absentee forms were not inserted into the batches of scripts at the venue where the examination was conducted.

i. Thekwini TVET College (Melbourne Campus):

- i. There was a shortage of question papers at the examination centre because the DHET had delivered only 25 question papers, and the remaining 38 question papers were photocopied.

j. Tshwane South TVET College (Centurion Campus):

- i. The drawing of the seating plan did not correspond with the information on the desks; and
- ii. The candidates were not given the prescribed 10 minutes of reading time.

k. Future Success Skills (Witbank):

- i. The personal assistant of the Director came into the examination room to take the attendance register for the invigilators and the Director also came into the examination room;

- ii. All candidates were allowed to write, including the ones who arrived late (09:40); and
- iii. Scripts were removed from the examination room by the Director; therefore, the monitor was unable to verify the packaging process of the scripts.

l. Saint Ignatius College (Witbank):

- i. Candidates were not given regulated reading time.

m. South West Gauteng TVET College (Roodepoort West):

- i. The DHET supplied the examination centre with insufficient question papers (25 instead of 167). Therefore, 142 question papers were photocopied for the candidates, and this caused the examination to start 30 minutes late and finish 30 minutes late.

n. Watersrand College (Newcastle):

- i. Candidates did not have examination permits, the Campus Manager reported that they received incorrect examination permits belonging to another college; and
- ii. The person left in charge of invigilation did not have an appointment letter and had not received any training.

The identified irregularities were resolved during the monitoring of the marking centres and did not compromise the integrity of the examinations. The reports reflect concerns directed to the DHET regarding the lack of vigilance in the management of the conduct of examinations.

3.4 Areas of Improvement

None.

3.5 Areas of Non-Compliance

The following areas of non-compliance were observed:

- a. Question papers were not distributed to candidates on time at Swinton Road, Molapo, Roodepoort West, ABM College SA, Melbourne, Mafikeng, and Saint Marks due to a shortage of question papers and the need for photocopying. This led to the examination starting and ending later than the stipulated time;
- b. At the Swinton Road campus, four candidates were permitted to write the examination without presenting their Identity document;
- c. At Future Success Skills (Witbank), all candidates were allowed to write, including the ones who arrived late (09:40);
- d. Scripts were removed from the examination room by the Director; therefore, the monitor was unable to verify the packaging process of the scripts;
- e. At Watersrand College (Newcastle), candidates did not have examination permits. The campus manager reported that they received incorrect examination permits belonging to another college.
- f. For the preparations of the examination, at some examination centres, it was found that:
 - i. There was no proper lighting in the examination rooms;
 - ii. Examination material was not stored in a safe/strong room; and
 - iii. The environment was not conducive to the writing of examinations.
- g. For preparations for writing and examination rooms/venues, it was found that:
 - i. The attendance register of invigilators was not signed; and
 - ii. Candidates were not seated according to a seating plan.
- h. For activities during writing, it was found that:
 - i. There were unauthorised personnel in the examination venue; and
 - ii. There were reported irregularities.

3.6 Directives for Compliance and Improvement

The DHET is required to ensure that:

- a. Examination centres comply with the policy pertaining to the conduct, administration, and management of the examinations;
- b. Examination centres strengthen the invigilation processes by ensuring that:
 - i. Invigilators are trained for every examination cycle;
 - ii. Candidates are seated according to a seating plan, and
 - iii. Examination rules are read to candidates.
- c. Examination centres are provided with the correct number of question papers;
- d. The examination starts and ends as per the time indicated on the timetable;
- e. All reported irregularities are attended to and resolved;
- f. Consequence management is applied to examination centres that violate examination regulations; and
- g. Consequence management is carried out against the non-compliant colleges.

3.7 Conclusion

The April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations were conducted, administered, and managed to an acceptable standard. The examination centres showed notable improvements in several key areas, such as the training of chief invigilators, the availability of the invigilation timetable, the checking of calculators where applicable, and the checking of question papers for technical accuracy.

However, significant non-compliance issues remain, particularly concerning the shortage of question papers delivered to the examination centres, time management during examination writing, and activities occurring in the examination venue. The DHET is urged to address these shortcomings promptly to improve overall compliance and uphold the standards of examination administration in future examinations. Although certain challenges were noted at specific centres, they did not compromise the overall integrity and credibility of the examinations.

CHAPTER

4

STANDARISATION OF MARKING GUIDELINES

4.1 Introduction

The process of standardising marking guidelines provides a platform for the DHET to facilitate discussions among markers, examiners, internal moderators, and external moderators from Umalusi. These discussions aim to reach consensus on the responses to each question before Umalusi approves the final marking guidelines.

The purpose of standardisation of marking guidelines is to ensure that the personnel involved in the marking process have a shared understanding of the marking guidelines and their interpretation. Additionally, this process allows for the inclusion of alternative responses in the final marking guidelines before implementation. Umalusi participates in the finalisation of the marking guidelines to ensure credibility, verify fairness, and report on the following:

- a. Preparedness of markers, chief markers, and internal moderators for the marking guideline discussions;
- b. Thoroughness of the marking guideline discussions;
- c. Standard and quality of the marking guidelines; and
- d. Consistency in the application of the marking guidelines across the marking centres.

The standardisation of marking guideline meetings was conducted using online platforms. In most cases, the meetings were chaired by the examiner or internal moderator responsible for setting the question paper, while in others, a chief marker chaired the meetings. There was one instance where both the examiner and internal moderator were absent, and the meeting continued with just one chief marker and the Umalusi moderator. All appointed officials were responsible for actively participating in the marking guideline discussion sessions.

4.2 Scope and Approach

Umalusi deployed 13 external moderators to attend the marking guideline discussion meetings for 13 instructional offerings, as listed in Tables 4B and 4C. Umalusi officials actively participated in the online marking guideline standardisation meetings hosted by the DHET on the Microsoft Teams platform, which were conducted between 27 March and 14 April 2025.

During the standardisation of the marking guideline meetings, Umalusi moderators offered guidance,

monitored the proceedings, endorsed final decisions, and approved the marking guidelines to be used during the marking process.

Table 4A presents the criteria and quality indicators used to evaluate the finalisation of the marking guideline process for NATED N2 - N3 instructional offerings. Umalusi moderators applied this standardised instrument to report their findings based on the following criteria:

Table 4A: Evaluation criteria and quality indicators for standardisation of marking guidelines

Criterion	Quality indicator
Attendance by marking staff	The level of attendance of appointed markers, chief markers, internal moderators, and external moderators. Adherence to punctuality.
Participation by attendees	The level of participation by attendees.
Preparedness of chairpersons	The extent to which individuals who chaired the meeting were prepared.
Final version of the marking guideline	Verification pertaining to whether the marking guideline presented is the final version approved by Umalusi.
Adjustments to the marking guidelines during the marking guideline discussions	Indication of adjustments made to the marking guidelines.
Justification for changes to the marking guidelines	The extent to which changes made to the marking guidelines were justified.
Impact of changes to the marking guidelines on the cognitive level of the answers/responses	Indication of whether changes to the marking guidelines influenced the cognitive level of the answers/responses required from candidates.
Complaints about questions beyond the scope of candidates	To determine whether the questions were within the scope of the candidates and free from ambiguity, etc.
Role of the external moderator in the marking guideline discussions	Role played by the external moderator.
General conduct of internal moderators, chief markers, and markers	The general conduct of attendees.
Signing off on the marking guidelines	The extent to which external moderators verbally signed off on the marking guidelines.
Comments and recommendations	Comments and recommendations pertaining to the general conduct of the marking guideline discussions.

Tables 4B (N2) and 4C (N3) list the instructional offerings and standardisation of marking guideline meetings attended by Umalusi and the dates on which these meetings were held.

Table 4B: N2 standardisation of marking guideline meetings conducted

No.	Instructional offerings	Date	Mode
1.	Building Drawing	28/03/2025	Online
2.	Building Science	01/04/2025	Online
3.	Engineering Science	01/04/2025	Online
4.	Industrial Orientation	28/03/2025	Online
5.	Instrument Trade Theory	09/04/2025	Online
6.	Mathematics	27/03/2025	Online
7.	Plating and Structural Steel Drawing	11/04/2025	Online
8.	Radio and Television Theory	10/04/2025	Online
9.	Welders' Theory	14/04/2025	Online

Table 4C: N3 standardisation of marking guideline meetings conducted

No.	Instructional offerings	Date	Mode
1.	Aircraft Maintenance Theory	11/04/2025	Online
2.	Engineering Science	31/03/2025	Online
3.	Mathematics	01/04/2025	Online
4.	Supervision in Industry	11/04/2025	Online

4.3 Summary of Findings

According to Umalusi moderators, all participants were well-prepared and engaged robustly, thus ensuring that the marking guidelines were an appropriate tool for the marking process. Tables 4D and 4E present the findings from the standardisation process.

Table 4D: Findings from the standardisation of marking guidelines for NATED N2 instructional offerings

Evaluation criteria	Findings and challenges	Instructional offerings
Attendance by marking staff	Chief markers, internal moderators, and markers attended the marking guideline discussions for 78% of the instructional offerings, compared to the 75% noted in the April 2024 meetings.	Building Drawing N2 Building Science N2 Engineering Science N2 Instrument Trade Theory N2 Mathematics N2 Plating and Structural Steel Drawing N2 Welders' Theory N2
	In one instructional offering, a chief marker chaired the meeting in the absence of the DHET examiner, internal moderator, and markers.	Radio and Television Theory N2
	In one instructional offering, the internal moderator and one chief marker attended. The examiner was not present.	Industrial Orientation N2
Chairperson of meetings	The chairperson in 78% of the instructional offerings was either the DHET examiner or internal moderator. This figure was registered at 50% in the April 2024 meetings.	Building Drawing N2 Building Science N2 Engineering Science N2 Industrial Orientation N2 Instrument Trade Theory N2 Mathematics N2 Welders' Theory N2
	In two instructional offerings, the meetings were chaired by chief markers from provinces.	Plating and Structural Steel Drawing N2 Radio and Television Theory N2
Participants on time	Eighty-nine percent of the participants were punctual.	Building Science N2 Engineering Science N2 Industrial Orientation N2 Instrument Trade Theory N2 Mathematics N2 Plating and Structural Steel Drawing N2 Radio and Television Theory N2 Welders' Theory N2
	In one instructional offering, the attendees were late.	Building Drawing N2

Evaluation criteria	Findings and challenges	Instructional offerings
The question papers and marking guidelines align with those approved by Umalusi.	In 89% of the instructional offerings, the question papers and marking guidelines used were the approved version.	Building Drawing N2 Building Science N2 Engineering Science N2 Industrial Orientation N2 Instrument Trade Theory N2 Plating and Structural Steel Drawing N2 Radio and Television Theory N2 Welders' Theory N2
	In one instructional offering, mark allocations differed between the approved marking guideline and the one presented for discussion.	Mathematics N2
Participation in the marking guideline discussions	Participants in all (100%) instructional offerings engaged actively in the discussions.	All instructional offerings
Chief marker/ internal moderator preparedness	The chief markers and internal moderators were adequately prepared for the discussions in 89% of the instructional offerings.	Building Drawing N2 Engineering Science N2 Industrial Orientation N2 Instrument Trade Theory N2 Mathematics N2 Plating and Structural Steel Drawing N2 Radio and Television Theory N2 Welders' Theory N2
	In one instructional offering, the chairperson was unaware that the screen had to be shared, making it a struggle to project the marking guideline.	Building Science N2
Adjustments to the marking Guidelines	Sixty-seven percent of the marking guidelines saw adjustments, including alternative responses, changes to rubrics, and mark reallocation. This represents a 33% decrease from the 100% registered in the April 2024 meetings.	Building Drawing N2 Building Science N2 Engineering Science N2 Mathematics N2 Plating and Structural Steel Drawing N2 Welders' Theory N2
	No adjustments to the marking guideline were made in three instructional offerings.	Industrial Orientation N2 Instrument Trade Theory N2 Radio and Television Theory N2
Changes to marking guidelines were justified.	Changes made to all 67% of the instructional offerings where adjustments were implemented were justified, which is consistent with the justification provided for changes in the previous equivalent meetings.	Building Drawing N2 Building Science N2 Engineering Science N2 Mathematics N2 Plating and Structural Steel Drawing N2 Welders' Theory N2
Impact on the cognitive level of questions due to changes in the marking guidelines	The changes to all 67% of the marking guidelines for the sampled instructional offerings did not impact the cognitive level of expected responses, thus registering equivalence with the previous corresponding meetings.	Building Drawing N2 Building Science N2 Engineering Science N2 Mathematics N2 Plating and Structural Steel Drawing N2 Welders' Theory N2

Evaluation criteria	Findings and challenges	Instructional offerings
Complaints about questions that were ambiguous or beyond the scope and level of candidates	In 100% of the instructional offerings, there were no complaints about ambiguous questions or beyond the scope of the candidates. This equates to the previous corresponding meetings.	
Signing off the marking guidelines	Umalusi signed off verbally on marking guidelines for all (100%) sampled instructional offerings, compared to 88% in the previous corresponding meetings.	
Role of the external moderator in the marking guideline discussions	In all (100%) instructional offerings, the external moderator played the role of observer and mentor, decision-maker, and generally provided support and guidance. This is consistent with the outcomes of the April 2024 meetings.	
Conduct of attendees	No concerns were raised about attendees' conduct in 100% of the instructional offerings.	
Comments and recommendations	The Umalusi moderators of pertinent instructional offerings appeal for the establishment of systems to ensure that all relevant personnel attend the scheduled discussions and commit to the process.	

Table 4E: Findings from the standardisation of marking guidelines for NATED N3 instructional offerings

Evaluation criteria	Findings and challenges	Instructional offering
Attendance by marking staff	Chief markers, internal moderators, and markers, attended the marking guideline discussion for 75% of the instructional offerings, compared to 83% in the April 2024 meetings.	Engineering Science N3 Mathematics N3 Supervision in Industry N3
	Only the examiner and one chief marker attended one instructional offering, and the internal moderator did not.	Aircraft Maintenance Theory N3
Chairperson of meetings	In 75% of the instructional offerings, the chairperson was either the chief marker or the internal moderator. This figure was registered at 50% in the previous corresponding examination.	Aircraft Maintenance Theory N3 Mathematics N3 Supervision in Industry N3
	In one instructional offering, the chief marker chaired the meeting.	Engineering Science N3
Participants on time	In 25% of the instructional offerings, the attendees were punctual.	Supervision in Industry N3
	In 75% of the instructional offerings, attendees were either late or present but busy on their phones, and the DHET examiner and internal moderator failed to log on, resulting in delays.	Aircraft Maintenance Theory N3 Engineering Science N3 Mathematics N3
The question papers and marking guidelines align with those approved by Umalusi.	The question papers and marking guidelines presented were the approved version in 75% of the instructional offerings.	Aircraft Maintenance Theory N3 Engineering Science N3 Supervision in Industry N3
	In one instructional offering, the marking guideline presented already had alternative responses added.	Mathematics N3
Participation in the marking guideline discussion	All participants in 100% of the instructional offerings, participated fully and competently. .	

Evaluation criteria	Findings and challenges	Instructional offering
Chief marker/ internal moderator preparedness	The chief markers and internal moderators were prepared for the discussions in 50% of the instructional offerings.	Mathematics N3 Supervision in Industry N3
	In 50% of the discussions, the relevant personnel struggled to explain the marking guidelines, whilst the new volunteer, in the absence of the DHET examiner and internal moderator, was totally unprepared.	Aircraft Maintenance N3 Engineering Science N3
Adjustments to the marking guidelines	In 100% of the instructional offerings, adjustments were made to the marking guidelines. This is equivalent to the April 2024 meetings.	
Changes justified	The changes were justified in all 100% of the instructional offerings, which equate to the previous corresponding meetings.	
Impact on the cognitive level of questions due to changes in the marking guidelines	The adjustments to the marking guidelines in all offerings had no impact on the cognitive levels. This is equivalent to the April 2024 examinations.	
Complaints about questions that were ambiguous, beyond the scope and level of the candidates	There were no complaints in all (100%) instructional offerings regarding ambiguity or questions beyond the scope of the candidates. This equates to the previous corresponding meetings.	
Signing off on the marking guidelines	Marking guidelines for all (100%) sampled instructional offerings were signed off verbally online, compared to the 83% recorded in the previous corresponding meetings.	
Role of the external moderator in the marking guideline discussions	In all (100%) instructional offerings, the external moderator served as an observer, contributed to discussions and facilitated consensus where applicable.	
Conduct of attendees	There were no adverse reports on the conduct of attendees.	Supervision in Industry N3
	In one instructional offering, the absence of the DHET examiner and internal moderator, who were the chairpersons, was cause for concern.	Engineering Science N3
	One attendee was late and continued to engage on his cell phone whilst the meeting was in progress in one instructional offering.	Aircraft Maintenance Theory N3
	Punctuality is critical, and logging on for up to an hour after the meeting's commencement cannot be condoned. This was the case in one instructional offering.	Mathematics N3
Comments and recommendations	The external moderator for Engineering Science N3 was perturbed by the absence of both the DHET examiner and internal moderator, who were to chair the meeting. This resulted in a 35-minute delay while the house attempted to find a chairperson who would obviously not be prepared to undertake such a task. The Umalusi moderator felt it was unprofessional and unfair to attendees.	

4.4 Areas of Improvement

The following areas of improvement were noted:

- a. Meetings chaired by the DHET internal moderators/examiners in N2 and N3 were at 50% of the previous corresponding meetings. An improvement of 28% and 25% was noted, respectively; and
- b. The number of adjustments to the marking guidelines in N2 was recorded at 100% in April 2024, compared to 67% in this meeting, thus marking a 33% improvement.

4.5 Areas of Non-Compliance

The following areas of non-compliance were noted:

- a. Seventy-five percent of the N3 marking personnel attended the marking guideline discussion meetings, reflecting a decline from the 83% attendance recorded during the previous corresponding meetings.
- b. Punctuality in general and commitment to the meeting were of major concern, with the DHET examiner and internal moderator failing to attend in one offering; and
- c. The approved version of the marking guideline (signed off by the external moderator during the external moderation of the question paper and marking guideline) was not presented in N2 in 89% of the offerings and in N3 in 75% of the offerings.

4.5 Directives for Compliance and Improvement

The following directives for compliance and improvement are issued, and the DHET must:

- a. Promote professionalism among marking personnel, particularly in areas such as attendance, punctuality, and online meeting etiquette and ensure that the DHET chairpersons commit to the meeting;
- b. Ensure that the marking guideline presented for standardisation is the version that was approved by Umalusi;
- c. Ascertain that all chairpersons are trained on the issue of screen sharing and other pertinent details aligned to online meetings;
- d. Develop strategies to ensure that all appointed participants attend the meetings, with the understanding that failure to attend will result in the withdrawal of their appointments;
- e. Provide Umalusi with a list of marking personnel for all instructional offerings prior to the marking guideline discussions. This will enable external moderators to assess the level of attendance and ensure representation from all marking centres;
- f. Use face-to-face standardisation of marking guidelines instead of online to ensure maximum attendance and participation; and
- g. Ensure that the final marking guideline discussed during standardisation of marking guidelines should be the one approved by the EM for the question paper.

4.7 Conclusion

The marking guideline discussion meetings brought to the fore areas that need improvement, such as enhancing the preparedness and professionalism of marking personnel, as well as, addressing issues pertaining to punctuality and etiquette. This process not only emphasises the commitment to maintaining fairness, consistency, and credibility in the evaluation of student responses but also reaffirms the stakeholders' dedication to upholding the quality and standard of the marking process.

CHAPTER



MONITORING OF MARKING CENTRES

5.1 Introduction

Umalusi monitored the marking centres of the April 2025 examinations for the NATED Report 190/191 Engineering Studies N2 - N3, as part of its quality assurance of assessment mandate. The purpose of this monitoring was to verify whether the Department of Higher Education and Training (DHET) had implemented the necessary systems and procedures to ensure the integrity and credibility of the marking procedures, in accordance with approved guidelines and policies.

The DHET provided Umalusi with the following:

- a. Enrolment information, reflecting the count of candidates registered for different subjects in the April 2025 examinations;
- b. Subjects to be marked at various marking centres;
- c. The location of the various marking centres, including the physical addresses; and
- d. The dates for the marking of the NATED Report 190/191 Engineering Studies N2 - N3 April 2025 examination scripts.

This chapter reports on the findings from the monitoring of seven DHET marking centres. It also acknowledges areas of improvement, highlights areas of non-compliance and provides directives for compliance and improvement.

5.2 Scope and Approach

The marking of the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations was conducted at seven marking centres (eight in April 2024) established by the DHET across seven provinces. Umalusi deployed staff members and monitors to monitor marking centres used by the DHET. The data used to compile this report was collected through on-site monitoring of the marking centres, along with interviews and observations carried out by Umalusi staff and monitors who used a specifically designed instrument for this purpose. The details of the monitored marking centres are provided in Table 5A.

Table 5A: Marking centres monitored by Umalusi staff and monitors

No.	Centre	Province	Date
1.	Hillside View Campus	Free State	23 April 2025
2.	Mpondozankomo Campus	Mpumalanga	17 April 2025
3.	Northdale Campus	KwaZulu-Natal	16 April 2025
4.	Pretoria West Campus	Gauteng	16 April 2025
5.	Seshego Campus	Limpopo	17 April 2025
6.	Struandale Campus	Eastern Cape	17 April 2025
7.	Thornton Campus	Western Cape	16 April 2025

5.3 Summary of Findings

5.3.1 Findings from the monitoring of marking centres

The findings in Table 5B are presented according to the criteria prescribed by Umalusi for monitoring marking centres.

Table 5B: Findings at marking centres monitored by Umalusi staff and monitors

Criteria	Findings	Marking centre
Preparation and planning for marking	Most of the marking centres were monitored. The preparation and planning for marking were in order, but the following was observed:	
	Some members of the management team did not report for duty at the centre as per the management plan. Their service was terminated and the centre management appointed replacements from the reserve list.	Northdale Campus
	The marking centre conducted a staggered marking for the written subjects: <ol style="list-style-type: none"> The first cohort started to mark on the 24/03/2025; The second cohort started to mark on the 5/04/2025; and Block marking commenced on 16/04/2025. <p>Furthermore, security officers patrolled the centre for 24 hours, and they also had access to first aiders whom they could contact in the event of a medical emergency.</p>	Pretoria West Campus
Marking centre resources	All the marking centres monitored had the necessary resources suitable for marking.	
Security measures provided	The security measures provided at all the visited marking centres were appropriate. These included: <ol style="list-style-type: none"> Access control to the marking centre; Managing unauthorised personnel; Movement of scripts from the control room to marking venues; and Transportation of scripts in and out of the marking centre. 	
	In addition to the security measures, the following was observed: The level of security has improved drastically. Security personnel use metal detectors, and each marking venue has three to four security officials.	Mpondozankomo Campus
	The security guards/officials conducted a body search of all marking officials upon arrival and upon departure from the building.	Hillside View Campus

Criteria	Findings	Marking centre
Handling of irregularities	The processes and procedures in handling irregularities, as set out by the DHET, were observed at all marking centres monitored.	
	At one of the marking centres monitored, it was observed that a daily time slot was set aside to deal with irregularities (14:30 – 16:30).	Northdale Campus
Monitoring by the assessment body	There was evidence of monitoring by the assessment body at six marking centres.	Hillside View Campus Mpondozankomo Campus Pretoria West Campus Seshego Campus Struandale Campus Thornton Campus
	At the time of the Umalusi visit, there was no evidence of the assessment body monitoring one marking centre.	Northdale Campus
	At the two marking centres listed, monitors from the assessment body compiled reports detailing their findings and suggestions.	Struandale Campus Thornton Campus
	The monitors from the assessment body did not leave reports at four of the monitored marking centres.	Hillside View Campus Mpondozankomo Campus Pretoria West Campus Seshego Campus
Quality assurance procedures and capturing of marks	At most of the marking centres visited by Umalusi: <ul style="list-style-type: none"> a. Examination assistants checked that marks were correctly totalled and transferred to the front pages of scripts and the mark sheets; b. The system for capturing marks at the marking centres was quality assured using a double-entry system, where one official captured and another verified; c. The capturing coordinator rechecked the captured data after the capturers had rechecked each other's work; and d. A separate room/area equipped with computers was used to capture the marks. 	
	At one of the marking centres monitored, Umalusi monitors sampled the marked scripts of N2 and N3 to view the totalling of marks and it was found that: <ul style="list-style-type: none"> i. In one script, the answer to 4.5 was not marked; ii. The finding was reported to the marking centre manager; iii. The answer worth three marks was then marked; and iv. The changes were made on the marksheet which was already in the capturing room. 	Hillside View Campus
Reports	At all the visited marking centres: <ul style="list-style-type: none"> a. The markers made notes to augment the qualitative report; b. The chief markers completed a qualitative report after the marking process; c. The internal moderators completed qualitative reports; d. There was a system in place to control the receipt of qualitative reports; and e. The deputy marking centre manager: academic, quality assured all submitted reports. 	

5.3.2 Marking Concessions

Umalusi received one marking concession request from the DHET for the April 2025 examinations of the NATED Report 190/191 Engineering Studies N2 - N3, compared to two in April 2024. During the monitoring of marking, Umalusi found that all centres strictly followed the decisions and verdicts of the marking concession for the affected subject.

Table 5C indicates the subject with a marking concession.

Table 5C: April 2025 marking concession

No.	Qualification/subject	Level
NATED Report 190/191 Engineering Studies		
1.	Electrotechnology	N3

5.4 Areas of Improvement

The following areas of improvement were noted:

- Levels of security improved, including the use of metal detectors and body searches; and
- Daily time slots were set aside to deal with irregularities.

5.5 Areas of Non-Compliance

The following was observed:

- Some members of the management team at the Northdale Campus did not report for duty at the centre as per the management plan;
- At Hillside View marking centre, a candidate's script for Industrial Electronics N3 was not marked for question 4.5. The matter was brought to the attention of the marking centre manager, and it was rectified;
- The monitors of DHET did not leave a report at four marking centres; and
- Not all scripts and marksheets were thoroughly quality assured.

5.6 Directives for Improvement and Compliance

The DHET must ensure that:

- a. The members of the management team at the marking centres are required to report for duty as per the management plan;
- b. All candidate scripts are quality assured or checked by the examination assistants, to ensure that all the answers provided have been marked before the marks are recorded on the marksheets; and
- c. The monitors of DHET need to provide a report.

5.7 Conclusion

All the monitored marking centres were adequately prepared for the marking processes. Each marking centre demonstrated the ability to address irregularities effectively by following the protocols established by the assessment body for the irregularity processes and procedures. Marking personnel diligently fulfilled their duties.

Consequently, it can be affirmed that the marking of the April 2025 examinations for NATED Report 190/191 Engineering Studies N2 - N3 was conducted in a manner that safeguarded the credibility and integrity of the assessments.

CHAPTER



VERIFICATION OF MARKING

6.1 Introduction

Umalusi ensures the quality of the marking process by verifying its consistency and accuracy. It also assesses whether both marking and internal moderation are conducted in line with the established standards and practices. This quality assurance process confirms the standard and quality of marking.

Umalusi quality assured the marking processes for the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations by verifying samples of instructional offerings. The purpose of this verification was to:

- a. Assess whether markers follow the approved marking guidelines and are consistently applied across instructional offerings and marking centres;
- b. Verify if any changes are made to the marking guidelines at the marking centres and ensure that due process was followed;
- c. Ensure that mark allocation and calculations are done accurately and consistently.
- d. Evaluate the accuracy of the transfer and recording of marks from scripts to mark sheets;

- e. Confirm whether internal moderation of the required percentage of scripts is conducted during marking; and
- f. Ensure that marking is fair, reliable, and valid.

The marking verification was conducted at six marking centres: Hillside View, Mpondozankomo, Northdale, Pretoria West, Seshego, and Thornton campuses.

This chapter reports on:

- i. The reliability and viability of the systems, processes, and procedures planned and implemented during the marking of the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations;
- ii. The quality and standard of marking and internal moderation;
- iii. The performance of candidates;
- iv. The identification of areas of compliance and non-compliance; and
- v. Directives for ensuring compliance.

6.2 Scope and Approach

Umalusi quality assured the marking processes for the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations by verifying the marking of a sample of 15 instructional offerings. This verification assessed the adherence of the marking to the approved standardised marking guidelines.

Umalusi sampled 15 instructional offerings from six marking centres for on-site monitoring and verification of marking. The sample comprised 10 N2 and 5 N3 instructional offerings, which are listed in Table 6B.

Umalusi deployed 14 external moderators across six marking centres to verify the standard and quality of marking as part of the verification process, ensuring that the marking is fair, reliable, and valid. Table 6A outlines the distribution of verified instructional offerings across these marking centres.

Table 6A: Distribution of verified instructional offerings across marking centres

No.	Marking Centre	Number of Instructional Offerings
1.	Hillside View Campus	2
2.	Mpondozankomo Campus	1
3.	Northdale Campus	2
4.	Pretoria West Campus	6
5.	Seshego Campus	2
6.	Thornton Campus	2
		15

Table 6B lists the 15 sampled N2 - N3 instructional offerings, including the dates and marking centres where on-site verification of marking was conducted.

Table 6B: Sampled N2 - N3 instructional offerings

No.	Instructional Offering	Date	Marking Centre
1.	Bricklaying and Plastering N2	2025/04/23	Pretoria West Campus
2.	Carpentry and Roof Work N2	2025/04/23	Pretoria West Campus
3.	Diesel Trade Theory N2	2025/04/13	Pretoria West Campus
4.	Electrical Trade Theory N2	2025/04/23	Pretoria West Campus
5.	Engineering Science N2	2025/04/21	Hillside View Campus
6.	Fitting and Machining Theory N2	2025/04/23	Northdale Campus
7.	Industrial Electronics N2	2025/04/23	Thornton Campus
8.	Logic Systems N2	2025/04/22	Pretoria West Campus
9.	Mathematics N2	2025/04/22	Seshego Campus
10.	Motor Trade Theory N2	2025/04/22	Thornton Campus
11.	Building Drawing N3	2025/04/19	Mpondozankomo Campus
12.	Electro-Technology N3	2025/04/23	Seshego Campus
13.	Engineering Drawing N3	2025/04/22	Northdale Campus
14.	Engineering Science N3	2025/04/22	Hillside View Campus
15.	Mathematics N3	2025/04/16	Pretoria West Campus

During the November 2024 examinations, Umalusi sampled 25 instructional offerings for the verification of the marking process. For the April 2025 examinations, the sample size was decreased to 15 instructional offerings. While this represents a smaller sample, it still falls within the accepted range when compared to previous verifications of the marking process.

Table 6C provides a breakdown of the number of provinces and examination centres for the N2 - N3 moderated instructional offerings, respectively.

Table 6C: Verification of marking for N2 - N3: Instructional offerings, number of provinces, and moderated scripts

Instructional Offering	Number of Provinces	Western Cape	Northern Cape	Free State	Eastern Cape	KwaZulu-Natal	Mpumalanga	Limpopo	Gauteng	North West	Province 10*
Bricklaying and Plastering N2	3								12	6	2
Carpentry and Roof Work N2	2								8		4
Diesel Trade Theory N2	3								18	1	1
Electrical Trade Theory N2	3								8	7	5
Engineering Science N2	2		10	10							
Fitting and Machining Theory N2	1					20					
Industrial Electronics N2	1	20									
Logic Systems N2	1								20		
Mathematics N2	1							20			
Motor Trade Theory N2	1	11									
Building Drawing N3	1							20			
Electro-Technology N3	1							20			
Engineering Drawing N3	1					20					
Engineering Science N3	2		10	10							
Mathematics N3	2								18	2	

Province 10* represents examination centres located outside the borders of South Africa.

Each external moderator purposively sampled and verified up to 20 marked scripts, except for Carpentry and Roof Work N2 and Motor Trade Theory N2. The selected scripts included those from various provinces and examination centres. The external moderator moderated student performance across low, average, and high levels.

6.3 Summary of Findings

This section presents and interprets the key results and compares the verification of marking for the April 2025 N2 - N3 examinations with the corresponding results from the April 2023 N2 - N3 examinations.

Table 6D summarises the findings from the verification of the marking process for the fifteen N2 - N3 instructional offerings.

Table 6D: Findings from the verification of marking for N2 - N3 instructional offerings

Criteria	Findings	Instructional Offerings
Availability of scripts	Twelve (80%) instructional offerings received all the expected scripts at the time of moderation. This compliance was likewise recorded in the April 2024 examinations.	Bricklaying and Plastering N2 Carpentry and Roof Work N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3
Training for marking	<p>Training of markers was conducted for fourteen (93%) of the sampled instructional offerings, showing a minor increase compared to 92% in the April 2024 examinations.</p> <p>Training primarily involves following procedures and protocols at marking centres, reviewing marking guidelines, and participating in sample marking discussions.</p>	Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3
Sample marking	<p>Marking consistency</p> <p>After training, each marker marked a copy of the same script to establish consistency in marking. This approach was used for all fifteen (100%) instructional offerings, reflecting a 4% increase compared to 96% in the April 2024 examinations.</p>	

Criteria	Findings	Instructional Offerings						
Sample marking	<p>Sampling from different centres</p> <p>For fourteen (93%) instructional offerings, a sample of scripts from various centres were selected for marking, indicating a 5% improvement from 88% in the April 2024 examinations.</p>	<p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p>						
	<p>Adhering to marking guidelines</p> <p>Adherence to the marking guidelines was observed during sample marking for 80% of the sampled instructional offerings, a decrease of 8% from 88% in the April 2024 examinations.</p>	<p>Carpentry and Roof Work N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3</p>						
Marking of question papers	<p>Adherence to the marking guideline</p> <p>Markers' adherence to the marking guidelines was considered good for eleven (73%) instructional offerings, reflecting a 15% decrease compared to 88% in the April 2024 examinations.</p> <p>The table below provides a breakdown of the different adherence categories:</p> <table border="1"> <thead> <tr> <th>Good</th> <th>Average</th> <th>Poor</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>3</td> <td>1</td> </tr> </tbody> </table>	Good	Average	Poor	11	3	1	<p>Good</p> <p>Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3</p> <p>Average</p> <p>Bricklaying and Plastering N2 Fitting and Machining Theory N2 Mathematics N3</p> <p>Poor</p> <p>Carpentry and Roof Work N2</p>
Good	Average	Poor						
11	3	1						

Criteria	Findings	Instructional Offerings						
Marking of question papers	<p>Standard of marking</p> <p>Eight (53%) of the instructional offerings used a question-wise approach, while seven (47%) employed a whole-script marking approach.</p> <p>The standard of marking was rated as good for 10 (67%) instructional offerings, reflecting a significant decrease of 17% compared to 84% in the April 2024 examinations.</p> <p>The table below provides a breakdown of the different marking standard ratings:</p> <table border="1"> <thead> <tr> <th>Good</th> <th>Average</th> <th>Poor</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>4</td> <td>1</td> </tr> </tbody> </table>	Good	Average	Poor	10	4	1	<p>Good</p> <p>Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Science N3</p> <p>Average</p> <p>Bricklaying and Plastering N2 Fitting and Machining Theory N2 Engineering Drawing N3 Mathematics N3</p> <p>Poor</p> <p>Carpentry and Roof Work N2</p>
	Good	Average	Poor					
10	4	1						
Administration	<p>Recording of marks</p> <p>All fifteen instructional offerings (100%) followed the prescribed procedure for recording marks on the front page of the script, consistent with the compliance observed in the April 2024 examinations.</p> <hr/> <p>Indicating a mark per question</p> <p>Marks were indicated per question in sampled scripts for all fifteen instructional offerings (100%), similar to the compliance level observed in the April 2024 examinations.</p> <hr/> <p>Indicating errors</p> <p>Mistakes/errors identified by moderators and/or examination assistants were indicated on the sampled scripts of thirteen (87%) of the instructional offerings. Compliance reduced by 5% compared to 92% in the April 2024 examinations.</p> <hr/> <p>Transfer of marks to the cover page</p> <p>There was full compliance (100%) for accurately transferring marks to the cover page. This represents an 8% improvement compared to 92% in the April 2024 examinations.</p>	<p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p>						

Criteria	Findings	Instructional Offerings
Administration	<p>Correct completion of mark sheets</p> <p>Mark sheets were completed correctly for all fifteen instructional offerings (100%). Compliance improved by 12% compared to 88% in the April 2024 examinations.</p> <p>The instances of non-compliance included failing to record marks as three digits, leaving blank spaces, and a marker and chief marker not signing the relevant documents.</p>	<p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p>
	<p>Note keeping</p> <p>Markers kept notes throughout the marking process for fourteen (93%) of the instructional offerings, reflecting a 5% improvement compared to 88% in the April 2024 examinations.</p> <p>Compliance was not recorded for Electrical Trade Theory N2, as well as in the three control measures that follow.</p>	
Control	<p>Marker identification</p> <p>Markers for fourteen (93%) sampled instructional offerings indicated their code/name in red ink on the cover page of the scripts, similar to compliance in the April 2024 examinations.</p>	<p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p>
	<p>For one instructional offering, compliance was not recorded.</p>	
	<p>Chief marker identification</p> <p>The chief markers for twelve (86%) of the instructional offerings clearly recorded their names on the moderated scripts, reflecting a 2% decline in compliance compared to 88% in the April 2024 examinations.</p> <p>For one instructional offering (Electrical Trade Theory N2) compliance was not recorded.</p>	
		<p>Electrical Trade Theory N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Engineering Science N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p>

Criteria	Findings	Instructional Offerings
Control	<p>Examination assistant identification</p> <p>Examination assistants for twelve (86%) of the sampled instructional offerings clearly recorded their initials/signatures on the checked scripts. This is a 2% improvement compared to the 84% in the April 2024 examinations.</p> <p>For one instructional offering (Electrical Trade Theory N2), compliance was not recorded.</p>	<p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Engineering Science N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Motor Trade Theory N2 Building Drawing N3 Electro-Technology N3 Engineering Science N3 Mathematics N3</p>
Internal moderation	<p>Evidence of moderation</p> <p>Internal moderation of scripts from all marking centres was evident for eleven (73%) of the instructional offerings, reflecting an improvement compared to 68% in the April 2024 examinations.</p> <p>Reasons for non-compliance include:</p> <ol style="list-style-type: none"> The external moderator moderated all scripts. An internal moderator was not appointed for the instructional offering. Internal moderation was not evident for all the centres. <p>Sampling of scripts</p> <p>Thirteen instructional offerings (87%) were internally moderated by randomly selecting scripts from high, average, and underperforming candidates, reflecting improved compliance compared to 88% in the April 2024 examinations.</p> <p>Two instructional offerings were not internally moderated.</p>	<p>Compliance</p> <p>Bricklaying and Plastering N2 Diesel Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Mathematics N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p> <p>Non-compliance</p> <p>Carpentry and Roof Work N2 (no IM) Electrical Trade Theory N2 Logic Systems N2 Motor Trade Theory N2 (EM moderated)</p> <p>Compliance</p> <p>Bricklaying and Plastering N2 Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p> <p>Not Applicable</p> <p>Carpentry and Roof Work N2 Motor Trade Theory N2</p>

Criteria	Findings	Instructional Offerings					
Internal moderation	<p>Approach</p> <p>Twelve (92%) instructional offerings were internally moderated using a whole-script moderation approach, compared to 76% in the April 2024 examinations.</p> <p>The table below provides a breakdown of the different moderation approaches:</p> <table border="1"> <thead> <tr> <th>Question-wise</th> <th>Whole-script</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>12</td> </tr> </tbody> </table> <p>Two instructional offerings were not internally moderated; therefore, the moderation processes were not applicable to these offerings.</p>	Question-wise	Whole-script	1	12	<p>Whole-script</p> <p>Bricklaying and Plastering N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Building Drawing N3 Electro-Technology N3 Engineering Drawing N3 Engineering Science N3 Mathematics N3</p> <p>Question-wise</p> <p>Diesel Trade Theory N2</p> <p>Not Applicable</p> <p>Carpentry and Roof Work N2 (one marker) Motor Trade Theory N2 (no IM)</p>	
	Question-wise	Whole-script					
1	12						
<p>Standard of internal moderation</p> <p>The standard of internal moderation for nine (69%) of the 13 moderated instructional offerings was rated as good, representing a slight decline compared to 72% in the April 2024 examinations.</p> <p>The table below provides a breakdown of the different moderation ratings:</p> <table border="1"> <thead> <tr> <th>Good</th> <th>Average</th> <th>Poor</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>4</td> <td>0</td> </tr> </tbody> </table> <p>Two instructional offerings were not internally moderated; therefore, the moderation processes were not applicable.</p>	Good	Average	Poor	9	4	0	<p>Good</p> <p>Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Industrial Electronics N2 Logic Systems N2 Mathematics N2 Building Drawing N3 Electro-Technology N3 Engineering Science N3</p> <p>Average</p> <p>Bricklaying and Plastering N2 Fitting and Machining Theory N2 Engineering Drawing N3 Mathematics N3</p> <p>Not Applicable</p> <p>Carpentry and Roof Work N2 (one marker) Motor Trade Theory N2 (no IM)</p>
Good	Average	Poor					
9	4	0					

Criteria	Findings	Instructional Offerings												
Candidates' performance	<p>Level of difficulty</p> <p>The majority of candidates found the question papers for the fifteen instructional offerings to be fair. The cognitive demand and level of difficulty met the expected standard.</p> <p>The table below provides a breakdown of the different levels of question paper difficulty:</p> <table border="1"> <thead> <tr> <th>Difficult</th> <th>Fair</th> <th>Easy</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>13</td> <td>1</td> </tr> </tbody> </table> <p>Candidate performance</p> <p>The table below provides a breakdown of student performance:</p> <table border="1"> <thead> <tr> <th>Good</th> <th>Average</th> <th>Below average</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>11</td> <td>2</td> </tr> </tbody> </table> <p>Although the question papers were considered fair, most candidates performed at an average level or below. For two instructional offerings (13%), candidates' performance was rated as good. The performance of candidates in eleven (74%) instructional offerings was rated as average. For two (13%) of the instructional offerings, candidates' performance was below average.</p>	Difficult	Fair	Easy	1	13	1	Good	Average	Below average	2	11	2	<p>Fair</p> <p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Diesel Trade Theory N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Motor Trade Theory N2 Electro-Technology N3 Engineering Drawing N3 Mathematics N2 Mathematics N3</p> <p>Difficult</p> <p>Engineering Science N3</p> <p>Easy</p> <p>Building Drawing N3</p> <p>Good performance:</p> <p>Logic Systems N2 Building Drawing N3</p> <p>Average Performance:</p> <p>Bricklaying and Plastering N2 Carpentry and Roof Work N2 Electrical Trade Theory N2 Engineering Science N2 Fitting and Machining Theory N2 Industrial Electronics N2 Mathematics N2 Motor Trade Theory N2 Electro-Technology N3 Engineering Drawing N3 Mathematics N3</p> <p>Below Average Performance:</p> <p>Diesel Trade Theory N2 Engineering Science N3</p>
Difficult	Fair	Easy												
1	13	1												
Good	Average	Below average												
2	11	2												
Fairness of the question papers	The question papers for all (100%) instructional offerings did not contain any unfair questions.													
Prevention and management of irregularities	No irregularities were reported in the marking of six (40%) of the sampled instructional offerings, showing an improvement from the 36% compliance in the April 2024 examinations.	<p>Carpentry and Roof Work N2 Fitting and Machining Theory N2 Industrial Electronics N2 Logic Systems N2 Motor Trade Theory N2 Building Drawing N3</p>												

Criteria	Findings	Instructional Offerings
The general quality of the marking process	<p>Marking was deemed to be of good standard and consistent for thirteen (87%) instructional offerings.</p> <p>Inconsistencies and errors were identified in the marking of Mathematics N3.</p> <p>The marking of Engineering Drawing N3 concluded prior to external moderation and had to be verified from reports.</p>	<p>Bricklaying and Plastering N2</p> <p>Carpentry and Roof Work N2</p> <p>Diesel Trade Theory N2</p> <p>Electrical Trade Theory N2</p> <p>Engineering Science N2</p> <p>Fitting and Machining Theory N2</p> <p>Industrial Electronics N2</p> <p>Logic Systems N2</p> <p>Mathematics N2</p> <p>Motor Trade Theory N2</p> <p>Building Drawing N3</p> <p>Electro-Technology N3</p> <p>Engineering Science N3</p>

6.4 Areas of Improvement

None.

6.5 Areas of Non-Compliance

The findings from the verification of marking identified several instances of non-compliance that may affect future marking processes.

- a. Adherence to the marking guidelines (80%) during sample marking decreased with 8% compared to 88% adherence in the April 2024 examinations;
- b. Administrative compliance in relation to errors that were indicated decreased by 5% compared to the April 2024 examinations;
- c. Control compliance regarding chief marker identification decreased by 2% compared to the April 2024 examinations; and
- d. The standard of the internal moderation of scripts rated as good (69%) decreased by 3% compared to the 72% rated in the April 2024 examinations.

6.6 Directives for Compliance and Improvement

To improve the standard and quality of marking, the DHET is required to:

- a. Ensure that all markers participate in marking guideline discussions and sample marking to improve the standard and quality of marking;
- b. Include the examiner and internal moderator in marking guideline discussions;
- c. Ensure that scripts from all centres are moderated, regardless of the number of scripts;
- d. Put measures in place to ensure that adherence to the marking guidelines and the standard of marking improves.
- e. Improve training on administrative duties for markers, moderators, and examination assistants to prevent administrative errors and ensure accurate completion of documents;
- f. Provide improved training to ensure all moderators and markers maintain high marking and moderation standards; and
- g. The appointed management team reports at the marking centres.

6.7 Conclusion

The marking and moderation of scripts for the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations were mostly consistent and accurate. The question papers were generally regarded as fair, with a cognitive balance across the assessments. Candidates' performance was mostly rated as average. External moderators identified several areas of concern, including poor examination preparation by students, limited exposure to practical or experiential learning opportunities, and an increasing trend of examination-only enrolment, as a result of the phasing out of the N2 and N3 programmes. Overall, the quality of the marking process showed an improvement.

CHAPTER



STANDARDISATION AND RESULTING

7.1 Introduction

Standardisation is a process informed by the evidence presented in the form of qualitative and quantitative reports. The primary aim of standardisation is to achieve the optimum degree of uniformity, in each context, by considering possible sources of variability other than the student's ability and knowledge. In general, variability may occur due to the standard of question papers, the conduct of examinations, the quality of marking, and other related factors. It is for this reason that examination results are standardised to control their variability from one examination sitting to the next.

In broad terms, standardisation involves verifying instructional offering structures, monitoring the capture of marks, conducting dry run testing for system alignment, developing and verifying norms, and verifying standardisation booklets in preparation for standardisation meetings. Standardisation decisions are informed by various factors, including Umalusi principles of standardisation, qualitative inputs compiled by internal and external moderators, and examination monitors and intervention reports presented by assessment bodies. The process concludes with the approval of mark adjustments per instructional offering, statistical moderation, and the resulting process.

7.2 Scope and Approach

Umalusi quality assured the results of 54 NATED Report 190/191 N2 - N3 Engineering studies instructional offerings for the April 2025 examinations, administered by the Department of Higher Education and Training (DHET), through the standardisation and resulting processes. In preparation for the standardisation meeting, Umalusi verified the historical averages (norms) after checking for outlier years, processed and verified the standardisation datasets, and the

e-booklet. During the pre-standardisation meeting, the Assessment Standards Committee (ASC) considered quantitative data and qualitative inputs to reach standardisation decisions per Instructional Offering. After the standardisation meeting, Umalusi verified the correctness of the adjustments applied to each instructional offering and subsequently verified and approved the resulting files on the instructional offering level.

7.3 Summary of Findings

The following section presents the most important results and decisions that occurred before, during, and after the standardisation meetings.

7.3.1 Development of Norms

The norms for the NATED Report 190/191 Engineering Studies N2 - N3 examinations were developed from the previous six examination sittings for the April 2025 examinations. Once that was done, according to the

policy requirements, the DHET submitted the norms to Umalusi for verification and approval purposes. Analysis of the norms' datasets showed that there were four instructional offerings with outlier years for the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations.

Table 7A below shows instructional offerings with outlier years for the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations.

Table 7A: List of instructional offerings with outlier years for the April 2025 NATED N2 - N3

Level	Code	Instructional Offering	Outlier year
NQF 2	11022192	Carpentry and Roofing Theory	202308
	11040572	Motor Bodywork Theory	202404
NQF 3	8120033	Water Treatment Practice	202411
	11041583	Refrigeration Trade Theory	202408

7.3.2 Electronic Datasets and Standardisation Booklets

The DHET submitted the standardisation datasets for verification purposes to Umalusi. The submitted standardisation datasets and booklet for the NATED Report 190/191 Engineering Studies N2 - N3 examinations adhered to the Requirements and Specification for Standardisation, Statistical Moderation and Resulting Guideline document. The standardisation datasets and the booklet were verified and eventually approved.

7.3.3 Pre-Standardisation and Standardisation

Umalusi held the pre-standardisation and standardisation meetings for the NATED Report 190/191 Engineering Studies N2 - N3 examinations on 08 May 2025. Many factors, including qualitative and quantitative data, guided the ASC in making adjustment decisions. The qualitative input included matters emanating from the moderation of question papers and discussions on marking guidelines, addressing issues that might unfairly advantage or disadvantage candidates, as well as cohort profiles and interventions. Quantitative inputs included the guiding norms and pairs analysis. All evidence was considered based on the established standardisation principles. The April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations standardisation adjustment decisions are listed in Table 7B:

Table 7B: List of standardisation decisions for the April 2025 NATED N2 - N3

Description	Total
Number of Instructional Offerings presented	54
Raw marks	29
Adjusted (mainly upwards)	16
Adjusted (downwards)	09
Unstandardised	0
Number of Instructional Offerings standardised:	54

Once the ASC was satisfied with the reliability of the information provided, all the instructional offerings presented were standardised. For the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations, the ASC accepted the raw marks for 29 out of 54 instructional offerings. Sixteen Instructional Offerings were adjusted upwards, and nine instructional offerings' marks were mainly adjusted downwards. Considering all the factors discussed at the standardisation meeting, the ASC expressed concerns regarding the suboptimal performance observed across a majority of the instructional offerings within the qualification. However, the DHET is commended for the excellent administration of the April 2025 NATED Report 190/191 Engineering Studies N2 - N3 examinations.

7.3.4 Post-Standardisation

Umalusi conducted the approval of the mark adjustments and the verification of the resulting process after the standardisation meeting. Umalusi verified the correctness of the adjustments applied to each instructional offering and subsequently verified and approved the resulting files on the instructional offering level.

7.4 Areas of Improvement

None.

7.5 Areas of Non-Compliance

None.

7.6 Directives for Compliance

None.

7.7 Conclusion

The standardisation decisions taken were based on sound educational reasoning. Therefore, Umalusi can conclude that the standardisation process was conducted in a fair, transparent, and reliable manner.

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