



Tshwane University  
of Technology

**Faculty of Science**

**Department of Sport Rehabilitation and Dental Sciences**

Wednesday, March 25, 2015

Prof K Naidoo  
Director: Accreditation  
Council on Higher Education  
1 Quintin Brand Street  
Persequor,  
TECHNOPARK, 0020  
Tel: +27 12 349 3852  
accreditation@che.ac.za

Dear Prof Naidoo

**RE: TUT RESPONSE ON THE ACCREDITATION OUTCOME OF THE DIPLOMA IN  
DENTAL TECHNOLOGY  
CODE : NDDTF0**

The Department of Sport, Rehabilitation and Dental Sciences at the Faculty of Science of the Tshwane University of Technology has taken note of the inconsistency found in the submission of the Category B Diploma and had made the following amendment. We trust that you find the amendment made to be satisfactory and up to your expectations.

**CONCERN**

The application is vague about the university's responsibility for placing students in the workplace. Since WIL is an integral part of the curriculum, the university's commitment to student placement must be explicit.

   
Tshwane\_University  
\_of\_Technology\_Dipl  
3 HEQSF  
Dental.docx

**RESPONSE TO CONCERN**

A WIL coordinator is appointed to manage the WIL placement process, assisted by other academic staff members and administratively by the Departmental Administrator. The coordinator provides a liaison service between employers, academics and students and assists students in finding placement and provides administrative and logistical support.

The department actively recruits places of work, in collaboration with private practises, academic hospitals and Military Health, with the cooperation of the Dental Technology Association of South Africa.

A file of accredited places of work (as per the Regulations of Act 19 of 1979 as amended) is kept by the department and used for the placement of students. The file is kept current. Memorandums of Agreement are in effect between the department and the accredited places of work, relating to the required outcomes and duration of the WIL.

The placement of students may follow two routes:

- Students are encouraged to find a workplace for WIL by themselves. This provides the student with an opportunity to job hunt in a protected environment. If the workplace is not accredited, the department will investigate the possibility of accrediting it as a place of learning. If accreditation is not feasible the student will be assisted in placement by the department.
- Students in need of placement, who could not find such for themselves, are referred to accredited places of work as kept on file and the WIL coordinator assists in the liaison between the employers and students, facilitating placement.

A student may also do different disciplines at different places of work. This is needed due to most places of work being specialists in their discipline. Rotation with specialists may be more advantageous than having one generic place of work. The department will manage such rotational WIL and place students as needed.

If it is found during evaluation by the WIL coordinator that the place of work is under-performing, students will be referred to and placed at another place of work. The same happens if there is not a match of personalities, etcetera.

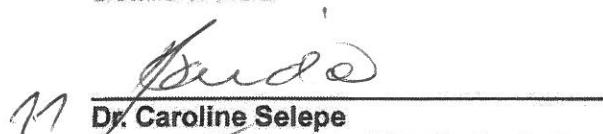
Kind Regards,



CM Snyman (Executive)

Date: 24/04/2015

Details of HOD



M

Dr. Caroline Selepe

Director: Directorate of Quality Promotion

Date:

# HEQSF Category B Alignment Questions

*Note: Please note that all references to criteria made in this document refer to the Criteria for Programme Accreditation*

## COMPULSORY QUESTIONS

1. Complete the table below indicating the specific amendments to the design of the learning programme that have been made. Please ensure that you indicate whether a module of the programmes has been added, removed, modified or remains unchanged. The amendments indicated should clearly illustrate that the proposed curriculum changes do not differ from the original programme design by more than 50% (Criteria 1 vi, 5 ii).
  - Criteria 1 vi: Modules and/or courses in the programme are coherently planned with regard to content, level, credits, purpose, outcomes, rules of combination, relative weight and delivery. Outsourcing of delivery is not permitted.

All modules (Table 1) were reviewed, formulated and aligned with the exit level outcomes listed in paragraph 4. As such, modules added or modified were planned in aligning them with the requirements of the existing programme consistent with the less than 50% rule of programme change.

- Criteria 5 ii: A teaching and learning strategy is in place which:
  - ✓ Is appropriate for the institutional type as reflected in its mission (programme types, research, and teaching), mode(s) of delivery (contact/distance/e-learning), and its student composition (age, full-time/part-time, advantaged/disadvantaged), etc.
  - ✓ Has a mechanism to ensure that teaching and learning methods are appropriate for the design and use of learning materials and instructional and learning technology.
  - ✓ Provides for staff development opportunities where staff can upgrade their teaching methods.

The Diploma in Dental Technology was reconceptualised in articulation with the mission of TUT as reflected in the purpose statement. As such, the teaching and learning strategy of the existing programme is consonant with the requirements pertaining to criteria 5 ii.

## Programme Details

Table 1:

Title of all modules	Module codes	Compulsory (C)/ Elective (E)	NQF level	Credits	No. of contact hours	Mode of delivery	Module status: Removed / Added / Modified / Unchanged
Applied Dental Technology	ADD105R	C	5	22	220.0	Contact	unchanged
Dental Technology Theory	DTD105R	C	5	12	60.0	Contact	unchanged
Dental Material Science	DMD105R	C	5	12	45.0	Contact	unchanged
Communication for academic purposes		C	5	8	30.0	Contact	Unchanged
Oral Anatomy and tooth morphology	OAD105R	C	5	10	45.0	Contact	Unchanged
Dental Laboratory Management	DLD105R	C	5	10	45.0	Contact	Added
Quality promotion	QPD105R	C	5	10	45.0	Contact	Added
Computing Skills		C	5	10	37.5	Contact	Added
Life skills		C	5	2	7.5	Contact	Unchanged
Wil	WID105R	C	5	24	240.0	Contact	Added
<b>YEAR 1</b>			<b>TOTAL</b>	<b>120</b>	<b>775</b>		
Applied Dental Technology	ADD206R	C	6	25	250.0	Contact	Unchanged
Dental Technology Theory	DTD206R	C	6	15	45.0	Contact	Unchanged
Dental Material Science	DMD206R	C	6	15	45.0	Contact	Unchanged
Jurisprudence	JUD105R	C	5	15	75.0	Contact	Unchanged
Dental Laboratory Management	DLD206R	C	6	12	45.0	Contact	Added
Quality promotion	QPD206R	C	6	12	45.0	Contact	Added
Library information		C	5	2	7.5	Contact	Added
Wil	WID206R	C	6	24	240.0	Contact	Added
<b>YEAR 2</b>			<b>TOTAL</b>	<b>120</b>	<b>752.5</b>		
Applied Dental Technology	ADD306R	C	6	20	200.0	Contact	Unchanged
Dental Technology Theory	DTD306R	C	6	15	60.0	Contact	Unchanged
Dental Material Science	DMD306R	C	6	15	60.0	Contact	Unchanged
Business Practice	BPD105R	C	5	15	60.0	Contact	Unchanged
Dental Laboratory Management	DLD306R	C	6	19	75.0	Contact	Added
Quality promotion	QPD306R	C	6	12	45.0	Contact	Added
Wil	WID306R	C	6	24	240.0	Contact	Added
<b>YEAR 3</b>			<b>TOTAL</b>	<b>120</b>	<b>740</b>		

**2. Briefly describe the purpose of this programme in relation to its alignment with the relevant HEQSF qualification type (Criterion 1 i, ii, iii, iv, v).**

- (i) The programme is consonant with the institution's mission and goals and was approved by the appropriate institutional structures, including Senate/equivalent structure. Provision is made for the programme in the Institution's planning and resource allocation processes.

The learning programme is in agreement with the mission of TUT as reflected in the purpose statement and is included in the PQM and enrolment plan of the faculty as approved by senate.

- (ii) The programme meets the national requirements pertaining to programmes which are at present being developed within the context of the NQF.

The learning programme is vocational and fits in the vocational pathway of the NQF.

- (iii) Learning outcomes, degree of curriculum choice, teaching and learning methods, modes of delivery, learning materials and expected completion time cater for the learning needs of its target student intake. Competences expected of students who successfully complete the programme are made explicit.

The learning programme replaces the National Diploma: Dental Technology with changes less than 50% and meets all the teaching and learning requirements as evident in the prospectus of 2014.

- (iv) The design maintains an appropriate balance of theoretical, practical and experiential knowledge and skills.

It has sufficient disciplinary content and theoretical depth, at the appropriate level, to serve its educational purposes.

The learning programme reflects an appropriate balance of theoretical, practical and experiential knowledge and skills as indicated in paragraph 5. Disciplinary content is sufficient in terms of scope and depth due to articulation of content with the exit level outcomes at level 6.

- (v) The design offers students learning and career pathways with opportunities for articulation with other programmes within and across institutions, where possible.

The diploma in Dental Technology articulates vertically with the Advanced Diploma in Dental Technology and provides mobility across institutions due to its design which is clearly aligned with the level descriptors.

## PURPOSE STATEMENT

A Diploma in Dental Technology is a vocational learning programme on level 6 of the NQF with the minimum credits of 360, preparing individuals for a career in the field of Dental Technology and training them to be Dental Technicians. Graduates will have knowledge of Dental prostheses such as caps, crowns, bridges, dentures, splints and orthodontic appliances. They will be able to demonstrate detailed knowledge of designing, constructing and repairing dental prostheses, including an understanding of and an ability to apply the key terms, concepts, facts, principles, rules and theories of Dental Technology to the work environment and knowledge of Dentistry. The graduate will be an educated and trained, competent, responsible and accountable dental technician for the dental profession who will be employed primarily in any dental laboratories worldwide. In doing so, not only is the patient's health needs looked after, but their self esteem is restored and maintained as well as the ability to be active participants in the economy. Completion of 360 credits diploma in Dental Technology will meet the minimum entry requirement for admission to Bachelors degree. Accumulated credits may also be presented for admission into cognate bachelors degree programme. It also meet the minimum entry requirements for admission to an advanced diploma. A qualification may not be awarded for early exit from a Diploma programme.

3. Describe how the curriculum of this programme has been redesigned so that it aligns with the HEQSF, specifically in relation to the intended purpose, exit level outcomes and assessment criteria for this programme (Criterion 1 iii, iv, 6 i, 13 i).

Table 2

No	
3.1	<b>Learning outcomes</b>
	degree of curriculum choice
	Diploma Dental Technology
	teaching and learning methods
	Theoretical and practical approach
	modes of delivery
	Contact
	learning materials
	PowerPoint, textbooks, practical exercise materials, notes, study guides.
	expected completion time cater for the learning needs of its target student intake
	3 years
	Competences expected of students who successfully complete the programme are made explicit
	The graduate will be an educated and trained, competent, responsible and accountable dental technician for the dental profession who will be employed primarily in any dental laboratories worldwide. In doing so, not only is the patient's health needs looked after, but their self esteem is restored and maintained as well as the ability to be active participants in the economy.

	A Diploma in Dental Technology is a 360 credits qualification that will run for a period of three years on contact basis and is intended to produce well rounded graduate at level 6 of the NQF who will be an educated and trained, competent, responsible and accountable dental technician for the dental profession who will be employed primarily in any dental laboratories worldwide. In doing so, not only is the patient's health needs looked after, but their self-esteem is restored and maintained as well as the ability to be active participants in the economy. The programme follows a practical and theoretical approach and was reconceptualised during a number of workshops and brainstorming sessions with all role-players involved, including comments and suggestions from the advisory committee. As such, the design process was structured within a realistic framework, focussing on conceptual and procedural principles. The "design down" principle was also followed throughout the whole process, with the purpose statement in the highest layer, informing the formulation of the exit-level outcomes (ELO's) and related assessment criteria and module
3.2	<b>The design maintains an appropriate balance of:</b>
	theoretical  Detailed knowledge of designing, constructing and repairing dental prostheses, including an understanding of and an ability to apply the key terms, concepts, facts, principles, rules and theories of Dental Technology to work environment and knowledge of Dentistry.
	practical  Practicals in the four different disciplines of Dental Technology, economic Dental Technology: Prosthetics, Crown and bridge, Cobalt Chrome and Orthodontics.
	experiential knowledge  Practicals in laboratories and 30 days per year observing commercial laboratory activities.
	skills  Applying skills in Prosthetics, Crown and bridge, Cobalt Chrome and Orthodontics.
	It has sufficient disciplinary content and theoretical depth, at the appropriate level, to serve its educational purposes.  The program has high level of theoretical and practical learning and the qualification is intended to equipping student with analytical thinking skills and the ability to solve problems.
	The learning programme as such is aligned with the purpose statement of the diploma (HEQSf, 2013:24) as well as the Mission and Vision of TUT, including indicators such as technology, innovation, entrepreneurship and engagement. The theoretical aspects in this programme will be based on the Detailed knowledge of designing, constructing and repairing dental prostheses, including an understanding of and an ability to apply the key terms, concepts, facts, principles, rules and theories of Dental Technology to work environment and knowledge of Dentistry. As such the practical aspects will be based on Practicals in the four different disciplines of Dental Technology, economic Dental Technology, Prosthetics, Crown and bridge, Cobalt Chrome and Orthodontics. The ELO's were formulated through the integration of the Level Descriptors with the Scope of Practice of a Dental Technology intended to provide graduates with Applying skills in Prosthetics, Crown and bridge, Cobalt Chrome

	and Orthodontics and are clearly pegged at level 6 of the NQF. As such, the ELO's informed the formulation of all modules, intended learning outcomes and related assessment criteria. The program has high level of theoretical and practical learning and the qualification will also equip graduates with analytical thinking skills and the ability to solve problems.	
3.3	<b>The programme has appropriate policies and procedures in all modes of delivery for:</b>	
	Internal assessment of student learning achievements by academic staff responsible for teaching a course/module of the programme in a system that includes internal moderation.	The assessment in this course are assessed by the first examiner and moderated by internal examiner on the entry levels and external moderators at exit levels in the four disciplines in Dental Technology.
	External moderation of students' learning achievements by appropriately qualified personnel. Moderators are appointed in terms of clear criteria and procedures and conduct their responsibilities in terms of clear guidelines.	A diploma in Dental Technology is a vocational learning program to produce well rounded graduates on level six of the NQF and will be assessed at this level according to university and statutory Council policies.
	Monitoring student progress in the course of the programme.	The areas to be monitored in this program are in Applied Dental Technology, Dental Technology Theory, Dental Materials Sciences, Oral Anatomy and Tooth morphology, Jurisprudence, Communication, Business Practice.
	Ensuring the validity and reliability of assessment practices.	Students will be assessed on the contents and assessment criteria communicated through study guides and relevant prescribed material.
	Secure and reliable recording of assessment results.	Marks accumulated by the learners from assessment activities are recorded in accordance with the TUT policy.
	Settling of student disputes regarding assessment results.	Upon receipt and verification of results by relevant student, students may act upon the university policy to lodge any dispute regarding their assessment results.
	Ensuring the security of the assessment system, especially with regard to plagiarism and other misdemeanours.	TUT favours student honesty and ethical behaviour. For this reason it prohibits plagiarism and violations of the Copyright Act in the preparation of assignments. Plagiarism entails the use of any published work or part thereof, whether from a book, a Web page, or other source, without due acknowledgement and the use of the correct citation method.
	Development of staff competence in assessment	Staff members attend short courses in assessment and

		moderation program available TUT and are encouraged to attend any relevant programs that are available within the teaching and learning environment.					
		The Learning Programme has appropriate policies and procedures for internal assessment. The assessment in this programme are assessed by the first examiner and moderated by internal examiner on the entry levels and external moderators at exit levels in the four disciplines of Dental Technology. As such there are internal and external moderation processes in place; monitoring of student progress in the areas of Applied Dental Technology, Dental Technology Theory, Dental Materials Sciences, Oral Anatomy and Tooth morphology, Jurisprudence, Communication, Business Practice and are explicit, valid and reliable in line with the institution's assessment practices as outlined in the assessment policy. Students will be assessed on the contents using the assessment criteria communicated through the study guides and the relevant prescribed material and the marks accumulated by the learners from assessment activities are recorded in accordance with the TUT policy. Therefore recording of assessment results; settling of disputes; the rigour and security of the assessment system and RPL are given a high priority. Upon receipt and verification of results by relevant student, students may act upon the university policy to lodge any dispute regarding their assessment results. TUT favours student honesty and ethical behaviour. For this reason it prohibits plagiarism and violations of the Copyright Act in the preparation of assignments. Plagiarism entails the use of any published work or part thereof, whether from a book, a Web page, or other source, without due acknowledgement and the use of the correct citation method. Staff members attend short learning programmes in assessment and moderation program available TUT and are encouraged to attend any relevant programs that are available within the teaching and learning environment as designed and provided by Curriculum development and support.					
3.4	Assessment is an integral part of the teaching and learning process and is systematically and purposefully used to generate data for grading, ranking, selecting and predicting, and for providing timely feedback to inform teaching and learning and to improve the curriculum.						
<table border="1"> <thead> <tr> <th>Formative</th> <th>Summative</th> </tr> </thead> <tbody> <tr> <td>The formative assessment are : Assignments, projects, practical work and WIL</td> <td>The summative assessments are: Formal test, examinations field work and practical assessment.</td> </tr> <tr> <td>Assignments are evaluated by tests grading, ranking, predicting and lecturer feedback. Projects: are field based reports for grading, ranking and lecturer feedback. Practical work: Is laboratory based evaluated by grading, ranking and predicting. Work Integrated Learning (WIL) is based in the earth sciences industry for a period of six months. It is evaluated by monthly performance work <i>log</i></td> <td>Formal tests (class tests &amp;semester tests) are used for grading, ranking and promotional purposes. Examinations are used for ranking, promotional and qualifications purposes. Field work is evaluated using field reports for ranking and grading purposes. Practical assessment in the Dental Technology is used for ranking, grading and promotional purposes.</td> </tr> </tbody> </table>		Formative	Summative	The formative assessment are : Assignments, projects, practical work and WIL	The summative assessments are: Formal test, examinations field work and practical assessment.	Assignments are evaluated by tests grading, ranking, predicting and lecturer feedback. Projects: are field based reports for grading, ranking and lecturer feedback. Practical work: Is laboratory based evaluated by grading, ranking and predicting. Work Integrated Learning (WIL) is based in the earth sciences industry for a period of six months. It is evaluated by monthly performance work <i>log</i>	Formal tests (class tests &semester tests) are used for grading, ranking and promotional purposes. Examinations are used for ranking, promotional and qualifications purposes. Field work is evaluated using field reports for ranking and grading purposes. Practical assessment in the Dental Technology is used for ranking, grading and promotional purposes.
Formative	Summative						
The formative assessment are : Assignments, projects, practical work and WIL	The summative assessments are: Formal test, examinations field work and practical assessment.						
Assignments are evaluated by tests grading, ranking, predicting and lecturer feedback. Projects: are field based reports for grading, ranking and lecturer feedback. Practical work: Is laboratory based evaluated by grading, ranking and predicting. Work Integrated Learning (WIL) is based in the earth sciences industry for a period of six months. It is evaluated by monthly performance work <i>log</i>	Formal tests (class tests &semester tests) are used for grading, ranking and promotional purposes. Examinations are used for ranking, promotional and qualifications purposes. Field work is evaluated using field reports for ranking and grading purposes. Practical assessment in the Dental Technology is used for ranking, grading and promotional purposes.						

	<i>book.</i>	
	The diverse curriculum of the Learning Programme reflects an appropriate balance of theoretical (fundamental and core learning) knowledge, practical and experiential knowledge and applied and reflexive competencies as indicated in the programme design in paragraph 1. The summative assessments are: Formal test, examinations field work and practical assessment. Formal tests (class tests & semester tests) are used for grading, ranking and promotional purposes. Examinations are used for ranking, promotional and qualifications purposes. Field work is evaluated using field reports for ranking and grading purposes. Practical assessment in dental technology is used for ranking, grading and promotional purposes. Disciplinary content in all modules is integrated and sufficient in terms of scope and depth due to articulation of content with the exit level outcomes at level 6 as listed in the table in paragraph 4.	

4. Discuss the overall assessment strategy and shows the constructive alignment of the programme design, teaching and learning strategy, and assessment procedures to the learning outcomes

**Criteria 6 i**

Table 3

No.	The programme has appropriate policies and procedures in all modes of delivery for:	
	Internal assessment of student learning achievements by academic staff responsible for teaching a course/module of the programme in a system that includes internal moderation.	The assessment in this course are assessed by the first examiner and moderated by internal examiner. Within each module students are requested to complete at least three (3) theoretical formal assessments, undertake tutorial mini assessment tasks in class, as well as present the results of a practical task.
	External moderation of students' learning achievements by appropriately qualified personnel. Moderators are appointed in terms of clear criteria and procedures and conduct their responsibilities in terms of clear guidelines.	The Senate appoints moderators for all modules. External moderators (from outside the University) are appointed for all exit level subjects/modules. An appropriate qualification for the assessment and moderation of subjects will be one level higher than the level of the subject to be assessed in the same discipline.
	Monitoring student progress in the course of the programme.	Student progress will be monitored through assignments, projects; practical work, WIL, formal tests. Summative assessment will takes place at the end of each student learning experience. Results are communicated in terms of marks for the relevant level of study.
	Ensuring the validity and reliability of	The assessment in this course are assessed by the first

	assessment practices.	examiner and moderated by internal/external examiner and assessment activities are guided by the assessment criteria stated in the study guide. Exit level practical exams are assessed by the educational inspector of statutory council to ensure that it conforms to minimum standards of the SADTC.
	Secure and reliable recording of assessment results.	The assessment results are captured in Information Technology System (ITS) of the Tshwane University of Technology (TUT) and are accessible to all parties involved.
	Settling of student disputes regarding assessment results.	The students are allowed to appeal the assessment results following TUT policy. ( review policy)
	Ensuring the security of the assessment system, especially with regard to plagiarism and other misdemeanours.	TUT favours student honesty and ethical behaviour. For this reason it prohibits plagiarism and violations of the Copyright Act in the preparation of assignments. Plagiarism entails the use of any published work or part thereof, whether from a book, a Web page, or other source, without due acknowledgement and the use of the correct citation method.
	Development of staff competence in assessment.	Staff members attend short courses in assessment and moderation program available TUT and are encouraged to attend any relevant programs that are available within the teaching and learning environment.

#### **Programme assessment approach (e.g. case-based assessment approach)**

All modules and related intended learning outcomes and relevant assessment criteria are underpinned, informed and constructively aligned with the Exit Level Outcomes (ELO's). The ELO's were designed in articulation with the level descriptors and are as such aligned with the purpose statement. All teaching and learning (T&L) strategies and experiences are aligned with these outcomes and as such inform the scope and depth of all related content. Instructional methodologies and related application and assessment tasks are infused by the outcomes and underpin the assessment criteria as well as assessment and reflection practices. The design down principle is consequently applied on all levels in the T&L process, constructing continuous development of constructive alignment, ensuring valid and authentic assessment practices. Student assessment is multifaceted in that it is undertaken as a mixed form of formative assessment tasks and a summative assessment following each academic semester or at the end of the module. Formative assessment: Learning and assessment are integrated. Continual formative assessment is done so that learners are given feedback on their progress in the achievement of learning outcomes. The scheme of work includes assignments based on the learning material and learners are given feedback. The process is continuous and focuses on smaller sections of the work and limited numbers of outcomes. Summative assessment: Summative assessment is concerned with the judgement of the learning in relation to the Exit Level Outcomes of the qualification. Such judgement includes Integrated Assessments which test the learner's ability to integrate the larger body of

knowledge, skills and attitudes that are represented by the Exit Level Outcomes as a whole. Examinations, projects, laboratory reports or equivalent assessment such as a portfolio of evidence assess a representative selection of the outcomes practised and assessed in the formative stage. Summative assessment also tests the learner's ability to manage and integrate a large body of knowledge to achieve the stated outcomes of a module.

**Theoretical approach to assessment:**

Conceptual and contextual knowledge are assessed using assessment tasks such as informal and formal tests and examinations for the purpose of summative assessment. Formative assessment is conducted through assessment tasks such as assignments (self-study) and presentations.

**Practical approach to assessment:**

Knowledge, skills and applied competencies are assessed using assessment tasks such as practical reports, written practical tests and practical skills tests for the purpose of both summative and formative assessment.

## **Exit level outcomes**

**ELO 1:** Demonstrate detailed knowledge of designing, constructing and repairing dental prostheses, including an understanding of and an ability to apply the key terms, concepts, facts, principles, rules and theories of Dental Technology to work environment and knowledge of Dentistry.

**ELO 2:** Demonstrate an ability to efficiently and diligently evaluate, select and apply appropriate methods, procedures or techniques by using knowledge of Applied Dental Technology, Dental Technology Theory, Dental Materials Sciences, Oral Anatomy and Tooth morphology within the Dental Technology environment.

**ELO 3:** Demonstrate an ability to critically analyse, identify, and solve unusual patient problems, gathering evidence using Applied Dental Technology, Dental Technology Theory, Dental Materials Sciences, Oral Anatomy and Tooth morphology and communicating it to the oral Health team and accountably apply solutions based on evidence gathered by following procedures appropriate to the Dental Technology field.

**ELO 4:** Demonstrate, understand and interpret the ethical and legislative implications and apply decisions and actions affecting the Dental Technology profession by using knowledge obtained from different acts inferred in Jurisprudence.

**ELO 5:** Demonstrate an ability to analytically evaluate and Interpret different sources of information in Applied Dental Technology using knowledge of Dental Technology Theory, Dental Materials Sciences, Oral Anatomy and Tooth morphology and ethically select information appropriate to the task, by applying well-developed processes.

**ELO 6:** Demonstrate an ability to reliably and coherently present and communicate appropriate academic and professional technologies using presentation and communication skills at dental technology conventions

**ELO 7:** Demonstrate an ability to make decisions and act appropriately in familiar and new contexts, demonstrating an understanding of the relationships between systems, and of how actions, ideas or developments in one system impact on other systems by using knowledge gained in Jurisprudence, Laboratory management and Business Practice.

**ELO 8:** Demonstrate an ability to evaluate Dental Technician's performance as stipulated by South African Dental Technicians Council (SADTC) and accurately identify and address his or her task-specific learning needs by continuously attending appropriate training and workshops which provide for compulsory Continuous Professional Development credits (CPD), and to provide support to the learning needs of the oral health team and others within the Dental Technology field.

**Criteria 13 i.**

**Assessment is an integral part of the teaching and learning process and is systematically and purposefully used to generate data for grading, ranking, selecting and predicting, and for providing timely feedback to inform teaching and learning and to improve the curriculum.**

Table 4

Year level	Assessment purpose	Assessment methods	
		Formative	Summative
<b>Level 1</b>	To inform students of their progress in relation to the outcome and to promote student to the next level based on the combination of all assessments.	The formative assessment are : Assignments, projects and practical work in the following subjects: Applied Dental Technology Dental Technology Theory Dental Material Science Communication Oral Anatomy and tooth morphology Jurisprudence Business Practice Dental Laboratory Management Quality promotion End user computing Life skills	The summative assessments are: Formal test and , examinations in Dental Technology Theory Dental Material Science Communication Oral Anatomy and tooth morphology Jurisprudence Business Practice Dental Laboratory Management Quality promotion End user computing Life skills and practical assessment in Applied Dental Technology
<b>Level 2</b>	To inform students of their progress in relation to the outcome and to promote student to the next level based on the combination of all assessments.	The formative assessment are : Assignments, projects and practical work in the following subjects: Applied Dental Technology Dental Technology Theory Dental Material Science Communication Oral Anatomy and tooth morphology Jurisprudence Business Practice Dental Laboratory Management Quality promotion End user computing Life skills	The summative assessments are: Formal test and , examinations in Dental Technology Theory Dental Material Science Communication Oral Anatomy and tooth morphology Jurisprudence Business Practice Dental Laboratory Management Quality promotion End user computing Life skills and practical assessment in Applied Dental Technology
<b>Level 3</b>	To inform students of their progress in relation to the outcome and to promote student to the next level based on the combination of all assessments.	The formative assessment are : Assignments, projects and practical work in the following subjects: Applied Dental Technology Dental Technology Theory Dental Material Science Communication Oral Anatomy and tooth morphology	The summative assessments are: Formal test and , examinations in Dental Technology Theory Dental Material Science Communication Oral Anatomy and tooth morphology Jurisprudence Business Practice Dental Laboratory Management

		morphology Jurisprudence Business Practice Dental Laboratory Management Quality promotion End user computing Life skills	Quality promotion End user computing Life skills and practical assessment in Applied Dental Technology
--	--	---	--

5. In the table below, indicate the types of learning activities of the amended programme design, and number of hours a student is expected to devote to each type. (This should refer to the table above relating to Programme details)

Criterion 1 vi: Modules and/or courses in the programme are coherently planned with regard to content, level, credits, purpose, outcomes, rules of combination, relative weight and delivery. Outsourcing of delivery is not permitted.

All modules (Table 1:) were reviewed, formulated and aligned with the exit level outcomes listed in paragraph 4. As such, modules added or unchanged were planned in aligning them with the requirements of the existing programme consistent with the 50% rule of programme change.

Types of learning activities	Hours	% Learning time
Direct contact time ( <i>Lectures, face to face, limited interaction or technology-assisted, tutorials, Syndicate groups</i> )	862.5	24%
WIL (Practical experiential learning, simulated learning, laboratory work , Practicals etc. excluding workplace-based learning)	146	4%
WIL (Workplace-based learning only) *	1405	39%
Independent self-study of standard texts and references and specially prepared materials (study guides, books, journal articles, case studies, multi-media)	601	16.7%
Assessment	585.5	16.3%
Other (specify)		
<b>Total</b>	<b>3600</b>	<b>100%</b>

6. Indicate the name of the statutory and non-statutory Professional Body that has a role in this programme and indicate whether the amendments to the programme design comply with the requirements of this statutory and non-statutory Professional Body (Criterion 1 viii).

The profession of Dental Technology is regulated and governed in South Africa by the South African Dental Technicians Council (SADTC). Through the Council, the Dental Technicians Act, Act 19 of 1997 is enforced. All aspects of the training of dental technicians are regulated by the above mentioned Act as well as the Higher Education Act. Specific standards and outcomes are prescribed and exit level practical examinations are moderated by the Education Inspector of the SADTC. The amendments to the programme were communicated to the council via the education committee and were accepted.

7. Provide details of how Recognition of Prior Learning (RPL) will be applied to this programme (Criteria 6 i, 13 v).

**Criteria 6 i**

The assessment in this learning programme are assessed by the first examiner and moderated by internal examiner. Within each module students are requested to complete at least two (2) theoretical formal assessments, submit a research related task, undertake tutorial mini assessment tasks in class, as well as present the results of a practical task undertaken on the field excursion.

The Senate appoints moderators for all modules. A moderator may be an internal or external person. External moderators (from outside the University) are appointed for all exit level subjects/modules. An appropriate qualification for the assessment and moderation of subjects will be one level higher than the level of the subject to be assessed in the same discipline. Student progress will be monitored through assignments, projects; practical work, field work, WIL, formal tests. Summative assessment will takes place at the end of each student learning experience. Results are communicated in terms of marks for the relevant level of study.

The assessment in this learning programme are assessed by the first examiner and moderated by internal/external examiner and assessment activities are guided by the assessment criteria stated in the study guide. The assessment results are captured in Information Technology System (ITS) of the Tshwane University of Technology (TUT) and are accessible to all parties involved. The students are allowed to appeal the assessment results following TUT policy.

TUT favours student honesty and ethical behaviour. For this reason it prohibits plagiarism and violations of the Copyright Act in the preparation of assignments. Plagiarism entails the use of any published work or part thereof, whether from a book, a Web page, or other source, without due acknowledgement and the use of the correct citation method. Staff members attend short learning programmes in assessment and moderation program available TUT and are encouraged to attend any relevant programs that are available within the teaching and learning environment.

No.	<b>The programme has appropriate policies and procedures in all modes of delivery for:</b>	
	Internal assessment of student learning achievements by academic staff responsible for teaching a course/module of the programme in a system that includes internal moderation.	See Table 3
	External moderation of students' learning achievements by	

Students normally find a workplace for Practical Laboratory Exposure themselves, but the programme will, in collaboration with the Dental Technology Association of SA assist in placement.

Students normally find a workplace for Practical Laboratory Exposure themselves, but the programme will, in collaboration with the Dental Technology Association of SA assist in placement.

**Supervision of students in industry:**

A supervisor is assigned to the students in industry. In addition to this, the WIL coordinator visits the student and supervisor during the WIL period to establish relevance of training, quality of supervision, appropriateness of TUT training and safety of the student in the workplace. An introduction to WIL is given to the students to inform them of the WIL philosophy and process, including CV writing, interview skills, work ethics and other relevant topics to enable the students to be prepared for the work environment.

**Documentation to aid the students and employers: A comprehensive study guide including:**

- assessment due dates
- responsibilities of both students and employers
- reporting examples and guidelines for writing and presenting WIL experiences
- assessment forms for employers to continuously evaluate students throughout the WIL year and a monthly logbook to compile evidence of learning

**Assessment of learning:**

- The aim of this assessment is to measure the experience gained by the student in industry as well as to assess the progress and guide the student towards successful completion or compilation of the final report. Inclusive here is a reflection on the workplace based experience.
- A comprehensive report of all experience gained through industry experience and gets evaluated

	appropriately qualified personnel. Moderators are appointed in terms of clear criteria and procedures and conduct their responsibilities in terms of clear guidelines.	
	Monitoring student progress in the course of the programme.	
	Ensuring the validity and reliability of assessment practices.	
	Secure and reliable recording of assessment results.	
	Settling of student disputes regarding assessment results.	
	Ensuring the security of the assessment system, especially with regard to plagiarism and other misdemeanours.	
	Development of staff competence in assessment.	

(Criteria 13 v). RPL is done in an effective, reliable and consistent manner.

As per institutional policy, credits towards this qualification may be obtained by means of Recognition of Prior Learning (RPL). Learners with very relevant or related previous qualifications can be admitted into this programme through RPL route. Passes in the following will be required: 1. Potential assessment test based upon general knowledge, 2. Technology skill test, and 3. Interviews.

8. \*Where a workplace-based learning component is included, provide details as to how students will be placed into WIL programmes, how the WIL programme is appropriately structured, and how the WIL programme will be supervised and assessed. (Criteria 1 ix, 15 i-iv)

The Regulations of Act 19 of 1979 regulates WIL. An approved institution, in collaboration with the Advisory Committee, shall determine at what stage and for what period a student dental technician must undergo Practical Laboratory Exposure. (Currently thirty days per year) Practical Laboratory Exposure means training that exposes a student to the laboratory in order that such a student gains insight into the operations of and is exposed to the various tasks normally performed in such a laboratory and includes the active involvement of such work. A student may not do WIL in a workplace without the institution's approval. An approval will not be issued unless the institution is satisfied that proper practical training will be conducted at such a registered laboratory.

An approved institution, in collaboration with the Advisory Committee, shall ensure that the proficiency acquired through practical laboratory exposure and other practical work, together with academic training, is sufficient for a student dental technician to be employed as a dental technician.

Assessment