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HANDBOOK



DENTAL SCIENCES

WHAT IS A UNIVERSITY OF TECHNOLOGY?

A university of technology is characterized by being research informed rather than research driven where the focus is on strategic and applied research that can be translated into professional practice. Furthermore, research output is commercialized thus providing a source of income for the institution. Learning programmes, in which the emphasis on technological capability is as important as cognitive skills, are developed around graduate profiles as defined by industry and the professions.

IMPORTANT NOTICES

The rules in this departmental handbook must be read in conjunction with the General Rules (G Rules) contained in the DUT General Handbook for Students as well as the relevant subject Study Guides.

Your attention is specifically drawn to Rule GI (8), and to the process of dealing with students' issues.

NOTE TO ALL REGISTERED STUDENTS

Your registration is in accordance with all current rules of the Institution. If for whatever reason, you do not register consecutively for every year/semester of your programme, your existing registration contract with the Institution will cease. Your re-registration anytime thereafter will be at the discretion of the institution and, if permitted, will be in accordance with the rules applicable at that time.

FACULTY of HEALTH SCIENCES

FACULTY VISION, MISSION & VALUES

Vision: “Leading Transformative and Innovative Health Sciences Education”

Mission Statement: “Developing Holistic Professionals responsive to Healthcare needs” through *Excellence* in:

- Teaching and Learning
- Research, Innovation and Engagement
- Fostering Entrepreneurship

Values

Professionalism

To work within regulatory frameworks of professional conduct. To maintain and develop professional expertise and good work ethic.

Integrity

To conduct ourselves with strong moral principles. To be honest and authentic. To do what is ethical and just.

Ubuntu

To treat people with respect, fairness, courtesy, politeness and kindness.

Transparency

To conduct ourselves with openness and honesty through shared governance.

Accountability

To accept responsibility for one’s actions.

DEPARTMENTAL VISION, MISSION & VALUES

Department of Dental Sciences Vision:

Department Vision: “Advancing Excellence in Dental Science Education”

Mission Statement: “Developing Holistic Dental Professionals Responsive To Oral Healthcare Needs” through *excellence* in:

- Teaching, Learning and Assessment
- Research, Innovation, Engagement and
- Entrepreneurship

Values

Professionalism

To sustain professional expertise and engender ethical behaviour

Integrity

To practice and uphold moral principles, truthfulness and honesty

Accountability

To be liable for one’s decisions, commitments and actions

uBuntu

To embody mutual respect, dignity, empathy and altruism

Teamwork

To effectively work together towards common goals

ENVISION2030

transparency • honesty • integrity • respect • accountability
fairness • professionalism • commitment • compassion • excellence

CREATIVE. DISTINCTIVE. IMPACTFUL.

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I. DEPARTMENTAL & FACULTY CONTACT DETAILS

All departmental queries to:

Secretary: Mrs R Sukhu
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Fax No: (031)-3732047
Email: sukhui@dut.ac.za
Location of Department Gate 8, Steve Biko Rd, Ritson Campus, Mansfield School

Admin Assistant:
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All Faculty queries to:

Faculty Officer: Ms F T Mayisela
Tel No: (031)-3732701
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Location: Health Sciences Faculty Office, Gate 8, Steve Biko Road, Mansfield Site Area, Ritson Campus

Executive Dean: Prof G G Mchunu
Executive Dean's Secretary: Mrs B Khan
Tel No: (031)-3732704
Email: billkishk@dut.ac.za
Location: Executive Dean's Office, 8, Steve Biko Road, Mansfield Site Area, Ritson Campus

2. STAFFING

Head of Department	Vacant
Senior Lecturer:	Dr A Vahed, DTech: Quality (DUT),
Lecturers	Dr M Radebe, PhD:Dent Theraphy (UKZN), Ms M P P Zondi, MTech: Dent Tech (DUT), Mrs K Pillay, MPhil Quality(DUT), Mr T Gumbi, MHSc: Dental Tech (DUT), Mrs Y Ngombane, MHSc: Dental Tech (DUT)
Technician	Mr K Padayachee, BTech: Dental Tech
Secretary Dental Sciences	Mrs R Sukhu, B Tech: Commercial Administration (ML)
Admin Assistant Dental Assisting	Vacant
Senior Technical Assistant	Vacant
Technical Assistant	Mr M P Phewa
Admin Assistant	Mr M Ndebele

3. DEPARTMENTAL INFORMATION & RULES

3.1. PROGRAMMES OFFERED BY THE DEPARTMENT

This department offers two programmes, namely

- Dental Technology
- Dental Assisting

3.2. QUALIFICATIONS OFFERED BY THE DEPARTMENT

Learning programmes are offered in this Department which will, upon successful completion, lead to the award of the following qualifications:

Qualification	Qual Code	SAQA NLRD Number	Important Dates
HC: Dental Assisting ND: Dental Technology ND: ECP: Dental Technology (ECP) MHSc: Dental Technology DDentalTech: Dental Technology	HCDNA NDDNTI NDDTFI BHDNTI MHDNTI DTDNTI	73492 72222 72222 94626 9462696826 72095	Teach Out 2024 Teach Out 2024

3.3. DEPARTMENTAL INFORMATION

3.3.1. Academic Integrity

Please refer to the General Rules pertaining to academic integrity G13 (1)(o). These will be enforced wherever necessary to safeguard the worthiness of our qualifications, and the integrity of the Faculty of Health Sciences at the DUT.

3.3.2. Code of Conduct for students

In addition to the General Rules pertaining to Conduct SR3 (3), a professional code of conduct pertaining to behaviour, appearance, personal hygiene and dress code shall apply to all students registered in both Dental Technology and Dental Assisting programmes. Students are not allowed to perform private work for patients or dentists, or any other dental professional. This aligns with Sub-section No. 17 of Section 1.16 of SADTC ACT.

3.3.2.1 Laboratory Conduct

Only Dental Technology students are allowed in the Dental laboratories.

- Noise levels should be kept low at all times.
- Handbags/Backpacks should be stored in the designated bag areas.
- No student may bring food into the dental laboratory. There is strictly no eating allowed in the dental laboratory.
- No laptops are allowed in the dental laboratories, unless prior arrangements have been made with the lecturer.

- No earphones may be used, unless permitted by the lecturer.
- Students may not work at another student's work station.
- Students cannot enter, or sit, in another dental laboratory without the lecturer's permission.
- Students are to avoid material wastage.
- Students are to ensure that machinery and Bunsen burners are switched off when not in use. Remember that Bunsen burners utilise "priceless" oxygen thereby increasing the carbon dioxide levels in the labs.
- Students arriving late for practical sessions will need to provide reasons for their lateness in a letter addressed to the lecturer. Lateness means that you will be missing part of the practical, as well as creating a disturbance for the other students.
- Students need to obtain their lecturer's permission to leave the lab.
- At the end of each day, students will be dismissed by the lecturer.
- Attendance registers will be signed at the beginning and the end of the practical sessions.
- Students must adhere to all Health and Safety regulations whilst working in the laboratories.
- Students must comply with all COVID-19 regulations at all times.
- Students arriving late for a test will be allowed entry up to one hour after the commencement of the test. Such students will not be allowed extra time.
- No student may leave a test venue within the first hour of a test or thereafter without the permission of the invigilator.

Cleaning of Laboratories

- Students must try and work meticulously at all times.
- Student "mess/mishaps" must be cleaned immediately by the student concerned.
- All students will clean the laboratory and plaster rooms daily prior to the end of the practical.
- Student workbenches and surroundings areas (*including laboratory floors*) are to be kept clean and tidy at all times.
- Students who abscond and/or do not clean will need to appear before a departmental student tribunal.

Dress Code:

- Laboratory coats and other protective clothing must be worn at all times when in the dental laboratory.
- Closed shoes must be worn at all times when in the dental laboratory.
- Appropriate attire is to be worn at all times. Inappropriate dressing will not be tolerated and any student in contravention of this will not be allowed in the dental laboratory.
- Hats, beanies and caps are not to be worn in the dental laboratory.
- Long hair, including a hairpiece, must be tied up at all times.
- Face masks and protective goggles must be worn when appropriate (when working off or grinding/ working in the casting room).

Discipline

- Students found to contravene the code of conduct will appear before the departmental student tribunal for appropriate disciplinary action. Note that disciplinary action is required to correct the student's misdemeanour.
- Students who continually transgress these rules will then be referred to the institutional disciplinary tribunal.

3.3.3. Uniforms

Students must adhere to instructions regarding specific uniforms required during practical's and clinic sessions.

3.3.4. Attendance

Students are encouraged to achieve hundred percent (100%) attendance for all planned academic activities as these are designed to provide optimal support for the required competency. Where absence is unavoidable, Subsection 3.4.6 of this handbook will apply.

Health and Safety

Students must adhere to all Health and Safety regulations and COVID-19 regulations, both at DUT and during Workplace Based Learning (WPBL) placements. Failure to do so will be treated as a breach of discipline.

3.4. DEPARTMENTAL RULES

3.4.1. Registration

Students should comply with late registration provisions of DUT management as announced each year. Students need to ensure that they have registered for the correct modules as early as possible, to allow for changes to be effected if necessary, before the cut-off dates. Incorrect registration may lead to

noncompletion of the correct module and overall failure of the level of study.

3.4.2. **Discipline**

Rules of conduct pertaining to a specific laboratory as instituted by the Head of this Department shall apply to all students registered for the particular module.

3.4.2.1 **Material Wastage**

Students found to be wasting materials will be disciplined in terms of completing several hours of community service.

3.4.2.2 **General Disciplinary Issues**

The Head of Department shall have the right to constitute an internal disciplinary tribunal should he/she deem this necessary. The sentencing of the internal disciplinary tribunal shall be limited to cleaning duties or community work.

3.4.2.3 **Equipment**

Equipment Damage: students found to have wilfully damaged any equipment will be charged the full amount of the repair / replacement. The Department is **NOT** responsible for any damage to personal equipment caused by **“POWER SURGES.”**

Issued Equipment: students will be allocated departmental equipment for the duration of the year. It is the student’s responsibility to take care of the said equipment. Any equipment, lost, stolen or damaged will be to the account of the student to whom the equipment was issued.

Please note: the department supplies lockers for the safe-guarding of equipment.

3.4.2.4 Laboratory and/or Clinic Cleaning

Students are required to clean laboratories and/or clinics at the end of the teaching day. Dental Assisting students are to be present at general cleaning every Wednesday Afternoon Failure to be present will result in the student cleaning his/her laboratory or all the laboratories/clinic (up to one week) of the department of Dental Sciences or community work. Students transgressing this rule will be referred to the Registrar Academic for institutional disciplinary action. In those instances, where discipline is of a serious nature or that the student concerned has been found guilty of a similar offence, the matter will be referred to the DUTs disciplinary tribunal.

3.4.2.5 Absenteeism

Lecturers appreciate 100% attendance. Non-attendance will negatively impact student performances in modules. Please consult the respective study guide to ensure you know which teaching activities are compulsory for the course (i.e. due performance requirements) and the consequences of missing such activities. Please note that ALL assessments are compulsory. If, for any reason whatsoever you miss an assessment, be it a test, examination or the deadline for an assignment, or practical work you will be given zero for that assessment unless you can justify your absence. The reason cited must describe a circumstance that is both unexpected and sufficiently drastic that your absence was effectively unavoidable. The onus is on the student to present this justification to the appropriate authorities timeously. 'Timeously' means within three days of the assessment you missed. Acceptable proof of such circumstances includes death certificates, doctors' notes and/or medical reports. In addition, submission of justificatory documents does not in and of itself guarantee that your excuse will be accepted. If the documents you provide fail to convince that your absence was for genuinely pressing reasons, your excuse may be rejected, in which case you will be given zero for the relevant assessment. Reasons as attendance at music festivals, drivers licence/learners test and family holiday plans are not considered a valid reason for temporary leave of absence, so don't make plans that clash with the University calendar.

3.4.3. Workplace Based Learning (WPBL) or Practical Laboratory Exposure

The Department of Dental Sciences requires the student to undergo a period of experiential learning as part of the programme (Dental Technology and Dental Assisting). All prescribed subjects/modules and the prescribed experiential component must be passed in order to obtain sufficient credits to qualify for the qualification. The Institution undertakes to assist the student in obtaining suitable experiential learning placement. The employer must be accredited by the Institution for the purposes of experiential learning.

Students registered for **Applied Dental Technology III** are required to provide the department with proof of having completed Workplace Based Learning at a commercial laboratory.

- For the purposes of sub regulation (1) the council and the approved institution must approve and accredit any dental laboratory referred to in sub regulation (1) by a process of evaluation as determined by council from time to time, by Rule.
- An approved institution must ensure that the proficiency acquired through work integrated learning /practical laboratory exposure and other practical work, together with academic training, is sufficient for a student dental technologist to be employed as a dental technician or dental technologist.

Dental Laboratory Practice

Students are referred to Rule G28 in the General Handbook

- **Dental Laboratory Practice** learning is a compulsory component of this qualification and the student is required to attend 24 weeks in an accredited laboratory as well as meeting certain outcomes as specified in the Study guide for this module.
- A completed record book must be completed by the 31st March in the fourth year of study and must detail and provide proof of all completed **Dental Laboratory Practice** learning activities.
- Students are required to comply with the rules and regulations of the laboratory in which they are placed.
- Disciplinary matters occurring in the laboratory will in the first instance be subject to the Laboratory's Disciplinary Code of Conduct and then be referred to DUT for student disciplinary action if unresolved.

3.4.4. *Late submissions of practical tasks and assignments*

Practical tasks and assignments that are not handed in on the due date and time will be penalized. Students are reminded that assignments are given well in advance and that last minute problems can be avoided by completing assignments before the due date. **See discipline-specific study guides for further details.**

3.4.5. *Dental Clinic*

The Department of Dental Sciences operates a Dental Clinic for the training of Dental Technology and Dental Assisting students.

Dental Technology - Work generated by this clinic is handed to students to complete. Please note that the completion of this work is compulsory. The work completed by students for the clinic may be evaluated and the marks obtained by the student may be used in the determination of a student's year

mark.

Dental Assisting - Students are expected to assist the clinician with all procedures.

3.4.6. Special Tests and Condonement

Summative means all assessment marks that contribute to the final mark of a module, but not including examinations for the purpose of this rule.

In addition to Bullet 5 of Section 3.4.2 of this handbook, if a student misses a summative written, oral or practical assessment, **for reasons of illness**, a special assessment may be granted if the student provides a valid medical certificate specifying the nature and duration of the illness and a declaration that for health reasons the student could not sit for the assessment. **This certificate must be submitted to the subject/module lecturer, no later than one week after the date of the missed test.**

Any student who misses an assessment test, and any student who qualifies for a rewrite but fails to write it, will be scored a zero mark for the missed assessment.

3.4.7. Registration with the Professional Board: Dental Technology Students

In addition to the requirements of the General Rules (see Rule G3) a student who registers for the National Diploma in Dental Technology or Bachelor of Health Sciences in Dental Sciences or Postgraduate qualification in Dental Technology (practicing as a Dental Technician or Dental Technologist) shall be registered as a Student Dental Technician and must conform to the requirements as laid down by the South African Dental Technicians Council in the Dental Technicians Act, 1979 (ACT No, 19 of 1979 as amended on the 27 March 2020).

A graduate, on successful completion of the National Diploma in Dental Technology, and who has satisfied the requirements of the South African Dental Technicians Council shall be recognized by the South African Dental Technicians Council as qualified for registration as a dental technician. The said qualification shall entitle the holder thereof to practice a profession as a Dental Technician, however only in the capacity of employee.

No student who is in fee default with the Institution will be registered with the South African Dental Technicians Council until such time as his/her fees are paid up in full. This must be completed within five years of obtaining your qualification.

3.4.8. Registration with the Professional Board: Dental Assisting Students

In addition to the requirements of the General Rules (see Rule G3) a student who registers for the Higher Certificate in Dental Assisting shall be registered as a Student Dental Assistant and must conform to the requirements as laid down by the Health Professionals Council of South Africa.

A graduate, on successful completion of the Higher Certificate in Dental

Assisting, and who has satisfied the requirements of the Health Professionals Council of South Africa shall be recognized by the Health Professionals Council of South Africa as qualified for registration as a Dental Assistant.

No student who is in fee default with the Institution will be registered with the Health Professionals Council of South Africa until such time as his/her fees are paid up in full.

3.4.9 Appeals

Rule G1 (8) refers:

Any student wishing to appeal against:

- (a) The implementation of an Institutional Rule must do so in the first instance to the relevant Head of Department;
- (b) The decision of a Head of Department must do so via the relevant Executive Dean to the Faculty Board or a delegated Committee of the Faculty Board. The decision of the Faculty Board or a delegated Committee of the Faculty Board is final and no further appeals will be considered thereafter.

(Amended w.e.f. 2009/01)



4. NATIONAL DIPLOMA: DENTAL TECHNOLOGY 4.1 PROGRAMME INFORMATION (NDDNT I)

A diploma in Dental Technology enables a qualified dental technician to work as a dental laboratory employee upon registration with the South African Dental Technicians Council (SADTC). A final exit level practical assessment is conducted, in the concluding year of the programme, which, if completed successfully, enables the qualified student to register with the SADTC. Majority of subjects in this programme do not have a final examination. The results for these subjects are determined through a weighted combination of assessments. As such, there are no supplementary examinations. Students are encouraged to work steadily through the period of registration in order to achieve the highest results possible. Assessment details are listed under each subject at the back of this handbook. Moderation follows the DUT requirements. This qualification is not aligned to the HEQSF and thus is in the process of being phased out.

Code	Subjects	NQF Level	CA/E *	DoE Credits	SAQA Credits	Pre-requisite
Study Level 1						
OANA101	Oral Anatomy I	6	CA	0.080	9.6	Admission requirements
TMOR101	Tooth Morphology I	6	CA	0.080	9.6	
DMSC102	Dental Materials Science I	6	CA	0.350	42	
DTTH101	Dental Technology Theory I	6	CA	0.240	28.8	
APDT101	Applied Dental Technology I	6	CA	0.170	20.4	
PHCD111	Physics & Chemistry I (Mod 1) (Physics)	6	E	0.100	7	
PHCD121	Physics & Chemistry I (Mod 2) (Chemistry)	6	E	0.100	15	
Study Level 2						
DMSC211	Dental Materials Science II (Module 1)	6	E	0.200	24	Dental Materials Science I
DMSC221	Dental Materials Science II (Module 2)	6	E	0.200	24	Dental Materials Science II
DTTH211	Dental Technology Theory II (Mod 1) (Crown/Bridge & Orthodontics)	6	CA	0.125	15	Dental Tech
DTTH221	Dental Technology Theory II (Mod 2) (Chrome & Prosthetics)	6	CA	0.125	15	Dental Tech
APDT201	Applied Dental Technology II	6	CA	0.250	30	Tooth Morphology I, Applied Dental Technology I, Dental Materials
JURI111	Jurisprudence I (Module 1)	2	E	0.085	6	Jurisprudence I
JURI121	Jurisprudence I (Module 2)	2	E	0.085	6	

LEARNING	Study Level 3					
	BPRD101	Business Practice I	6	CA	0.170	12
DMSC301	Dental Materials Science III	6	CA	0.350	42	Dental Materials Science II, Oral Anatomy, Dental Technology Theory II
DTTH311	Dental Technology Theory III (Mod 1) (Crown/Bridge & Orthodontics)	6	CA	0.140	16.8	Dental Technology Theory II (Mod 1) (Crown/Bridge & Orthodontics), Oral Anatomy
DTTH321	Dental Technology Theory III (Mod 2) (Chrome & Prosthetics)	6	CA	0.140	16.8	Dental Technology Theory II (Mod 2) (Chrome & Prosthetics), Oral Anatomy
APDT301	Applied Dental Technology III	6	CA	0.200	24	Oral Anatomy, Applied Dental Technology II, Dental Materials Science III
ETDN301	Experiential Learning	6	CA	0.000	0	Oral Anatomy I
CMCA102	Communication I	6	CA	0.080	9.6	

*CA = Continuous Assessment; E = Examination at end of Subject / Module

4.2 PROGRAMME RULES

4.2.1. Minimum Admission Requirements

In addition to Rule G7 the minimum entrance requirement for entry into the programme of study is a National Senior Certificate (NSC) with endorsement for degree entry with the following subjects:

Subject	NSC Rating
English (home) OR English (1st additional)	3
Physical Sciences OR	3
Mathematics OR	3
Mathematics Literacy	6
And two 20 credit subjects (not more than one language)	3

The minimum requirement for holders of the Senior Certificate is matriculation exemption with the following subjects at the stated ratings:

Compulsory Subjects	HG	SG
Mathematics OR Physical Science	E	C

The latter also applies to National Certificate (Vocational) level 4 candidates. The DUT General Rules G7 (3) will apply for admission requirements

based upon Work Experience, Age and Maturity and Recognition of Prior Learning.

The DUT's Admissions Policy for International Students and General Rules G4 and G7 (5) will apply for admission of International students.

4.2.2. Selection Processes

In accordance with Rule G5, acceptance into the programme is limited to 29 places. As more qualifying applications are received than can be accommodated, the following selection process will determine placement in the programme:

All applicants must apply through the Central Applications Office (CAO). Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 12 June / trial marks will be used for current matriculants) together with a submission of a portfolio. Shortlisted students will then be invited to undergo placement testing. Applicants who pass the placement tests are invited for an interview. Provisional acceptance is given to selected applicants awaiting National Senior Certificate (NSC) results. If the final Grade 12 NSC results do not meet the minimum entrance requirements, this provisional acceptance will be withdrawn. Final selection for placement will be based on results in the SC / NSC and DUT placement tests.

4.2.3. Pass Requirements

Notwithstanding the DUT pass requirements (G14 and G15), and those detailed as follows, students are encouraged to apply themselves to their learning, and strive for the best academic results possible in order to adequately prepare themselves for their future careers, and to maximize possible employment opportunities. In line with SADTC requirements, students must complete their National Diploma qualification within five years.

4.2.3.1. A student Dental Technician shall not be permitted to enroll for Dental Technology Theory II and III; Dental Material Science II and III; and Applied Dental Technology II and III unless the student has passed the preceding level. (Consistent with Dental Technicians Act, 1979. Reg 21(2))

4.2.3.2. Tooth Morphology is a prerequisite for Applied Dental Technology II.

4.2.3.3. Oral Anatomy is a prerequisite for Applied Dental Technology III and Experiential Learning.

4.2.3.4. Continuous Evaluation Subject Rules

Please refer to Section 4.1 of this handbook to identify the subjects, which are evaluated by Continuous Assessment. Examinations will not be written in these subjects / modules. All modules will need to be passed in the same academic year. See "Subject Content" for further information as well as specific Study Guides, which contain specific rules for each subject. Any numbers of tasks may form the class work marks. This is solely dependent on the discipline-specific lecturer in charge of the different sections. Formal tests will be held during the year. These will be held as and when necessary.

Students failing formative class work and assessments are encouraged to repeat exercises to improve their performance.

4.2.3.5. Examination Subject Rules

Please refer to Section 4.1 of this handbook to identify the subjects / modules, which are evaluated by Examination.

A 40% year mark is required to enter the examination for each module for the above subjects.

A final pass mark of 50% is required for each module for the above subjects.

The examination for Module 1 is written during the mid-year examination period and for Module 2, during the year-end examination period.

A student failing Module 1 and Module 2 will be permitted supplementary examinations provided that the results obtained comply with the supplementary examination rules as contained in rule G13 (3).

A student must pass both modules in one academic year failing which the student will be required to re-register for both modules.

4.3.3.6 Rules for Dental Technology Theory II and Dental Technology Theory III

Both subjects run for the entire year (annual)

Both subjects consist of 2 modules each containing 2 study units:

- Module 1: Study Unit 1 —Crown and Bridge and Study Unit 2: Orthodontics;
- Module 2: Study Unit 1 —Chrome and Study Unit 2: Prosthetics

Final marks for each study unit will be determined as follows:

Assessment	Weighting	Sub minimum
Assessment 1	40%	
Assessment 2	50%	45% required
Assessment 3 (Assignment/presentation)	10%	50% required

Note for each Study Unit:

- In respect to Assessment 1, a subminimum mark is not applicable.
- A subminimum pass mark of 45% is required for Assessment 2. Failure to achieve a 45% sub-minimum mark will require students to write an end-of-year retest, which will take place in the last month of the academic year. . The mark achieved for this test will replace the worse mark of either Test 1 or Test 2. The maximum mark that can be achieved is 50%. Note that the re-test will include content from both Tests 1 and 2.
- A subminimum of 50% will apply to final assignments / presentations submissions. Students may be afforded formative assessment opportunities prior to the final submission.
- The final mark for each Study Unit comprises the marks scored for Assessment 1, 2, & 3 (Assignment/presentation) with the appropriate

- weightings. The final pass mark for each unit per Module is 50%.
- Credit for Dental Technology Theory II and Dental Technology Theory III subjects will only be granted if the student passes both study units for Module 1 and Module 2 in the same academic year for each theory subject. Therefore, failure in any study unit will necessitate re-registration for all study units per module.

Applied Dental Technology I

Final marks will be determined as follows:

Assessment	Weighting	Subminimum
Assessment 1	40%	-
Assessment 2	50%	45% required per discipline
Class work	10%	50% required per discipline

Applied Dental Technology II and Applied Dental Technology III

Both subjects consist of 4 study units.

Final marks for each study unit will be determined as follows:

Applied Dental Technology II

Assessment	Weighting	Subminimum
Assessment 1	40%	-
Assessment 2	50%	40% required per discipline
Class work	10%	50% required per discipline

Applied Dental Technology III

Assessment	Weighting	Subminimum
Assessment 1	40%	-
Assessment 2	50%	50% required per discipline
Class work	10%	50% required per discipline

Note: A 50% subminimum is required for Applied Dental Technology III (Assessment 2)

4.3.3.7. Rules for Practical Tests and Examinations

A. Preparation procedures prior to the commencement of the assessment and/or examination.

- A.1. All models, examples, teaching aids, previous work done by the students must be cleared out of the laboratory at least one day prior to the commencement of the test/examination. This is to ensure that no outside help or unfair advantage can be gained by the students. Students are to make their own

arrangements as to what they should do with these articles cleared from the laboratory.

- A.2. All materials, personal tools and equipment required for the practical must be on hand and in working order.
- A.3. The invigilator must ensure that all models are laid out or on-hand and clearly marked for the test / examination.

B. Test and/or examination day.

B.1. No student is allowed to communicate with another student, except when it is relevant to the practical test.

1.1 You are not allowed to discuss your practical cases during the practical test.

B.2. You are NOT allowed to have old models and practical work in your possession.

B.3. Cell phones are to be switched off and placed in your bags.

3.1 You are not allowed to have a cell phone in your possession, if found, it will be confiscated for the duration of the test.

B.4. All materials obtained prior and during this test are to be obtained from the Departmental Store only.

4.1 All communal materials must be obtained and returned to the invigilator.

B.5. A replacement model, if required, must be obtained from the designated invigilator on duty.

B.6. Students enter, go to their workstations, layout and prepare their tools and instruments.

B.7. The following will be read out prior to the test/examination papers being handed out: "This is an official test/examination of the Department of Dental Sciences as constituted by the Durban University of Technology. All rules of the Institution pertaining to tests and examination apply. These rules are to be found in the Rule Book for students of the Institution and are available to students on request. Those students contravening these rules will be prosecuted in terms of the rules of the Durban University of Technology by the Institution's disciplinary tribunal." (Note to invigilator: In the case of an examination a list of instructions to be read to students will be supplied by Examinations Office and must be read out as well as B.3)

B.8. Time of arrival for major practical tests, any student arriving late will be allowed into the laboratory only up to one hour after the commencement of the test. Such a student will not be allowed extra time. This is aligned with the DUT test and examination rules.

C. The following laboratory rules & procedures will apply:

C.1. No additional tools, instruments, models or equipment may be brought into the laboratory during the duration of the test/examination. Any additional materials required by the student to complete the test/examination may only be brought into the venue under the supervision of the invigilator. No tools, instruments, materials, models or equipment may be taken out of the laboratory until the end of the test/examination and after all work has been taken in for marking.

C.2. At lunch time, the invigilator will inform the students to stop working. All gas taps are to be turned off and the students are to stand by their workstations and await the invigilator's instructions. Upon checking each student's work the invigilator will give the student permission to leave the laboratory. At the end of the lunch break, the invigilator will allow the students to re-enter and carry on from where they left off.

D. At the end of the day:

D.1. The invigilator will inform the students to stop working.

D.2. All students will tidy their workstations and layout their work-in-progress on their workbenches.

D.3. All students will then clean the laboratory to the satisfaction of the invigilator.

D.4. After the laboratory has been cleaned, the students will stand by their workstations and the invigilator will check all work to ensure that everything is present. The onus is on the student to ensure that all his/her work is present on the bench for inspection. The student will then be told that he/she can go and must leave the laboratory immediately. The student's work is to be left on the top of his/her workbench. If the student has a muffle to go into the overnight furnace, the student must go to the casting room with the muffle and wait there for the invigilator.

D.5. After all the students have left, the invigilator will secure and lock the laboratory.

E. A student may not:

E.1. Touch or handle another student's work;

E.2. Discuss his/her work or another student's work with another student;

E.3. Leave the test/examination room FOR WHATEVER REASON without the permission of the designated invigilator;

E.4. Work at another student's workstation;

E.5. Invest or cast another student's work, either together or separately with their own work.

F. A student completing the work prior to the end of the test or examination may inform the invigilator that he/she is finished. He/she must then tidy his/her workstation and hand in his/her completed work. The student must then leave the laboratory immediately. At the end of the test or examination, the student

must return and help to clean the laboratory.

- G.** At the end of the test/examination, the invigilator will stop the students from working. Students are then required to clean the laboratory. When the laboratory is clean, the invigilator will take in the student's work. It is the student's responsibility to see that all his/her work is clearly marked with his/her name or number.
- H.** Students are to hand in their own work. Test/examination work MAY NOT be handed in by another student.
- I. Casting procedure**
- I.1 A student may only cast his/her own work.
- I.2 The student will ensure that his/her muffle and casting ring is clearly marked with his/her name or number.
- I.3 In the event that a student casts another student's muffle and casting ring his/her own muffle and casting ring will be withdrawn and he/she will have to start that section of work again. If the other student's muffle is a miscast, he/she will be allocated extra time only at the discretion of the Head of Department.
- I.4 All castings need to be performed in the presence of the invigilator. When ready to cast please inform the invigilator. Failure to do so will result in your casting being withdrawn.
- I.5 All work must be carried out and submitted on an appropriate articulator.

Note:

Any contravention of the above mentioned instructions/requirements will lead to disciplinary action.

J. Flasking and Packing of Dentures

The student will ensure that his/her flasks and clamps are clearly marked or labelled with his/her name or number. In the event that a student packs or flasks another student's work, his/her own work will be withdrawn and he/she will have to start that section of the work again. If the other student's work has been damaged, he/she will be allocated extra time at the discretion of the Head of Department.

K Procedure for packing overnight furnace

When a student wants a muffle or casting ring to go into the overnight furnace he/she will take the muffle or cast ring to the casting room after his/her work station has been checked at the end of the day. The invigilator will then pack the furnace and set the times and temperature. Each student will note the

position of his/her muffle or casting ring in the furnace and the casting in the morning will be in the reverse sequence to the placing of the muffles or casting rings the night before.

- L After the invigilator has confirmed that students acknowledge the rules as displayed on the class notice board and those additional rules and/or instructions (where necessary) have been verbally explained, the paper is issued and the test/examination will start.

4.3.4. First Aid Certificate

Students shall not be permitted to sit for their Final Assessment in their Exit-level year of study unless they are in possession of a Certificate in General First-Aid issued by a first-aid organization recognized by the Institution. Students missing the course for any reason will be expected to obtain the required certificate at their own cost and in their own time. Students shall not be permitted to graduate unless they are in possession of the first-aid certificate.

4.3.5. Re- Registration Rules

Rule G16 of the General Handbook for Students applies.

4.3.6. Exclusion Rules

In addition to Rule G17, the following rule applies: A first year student who fails 3 or more subjects with a final mark of less than 40% in these subjects will not be permitted to re-register in the Dental Technology programme. De-registration from any subject is subject to the provisions of Rule G6 (2). Students wishing to re-apply must do so in writing to the department and may be required to undergo further placement testing.

4.3.7. Interruption of Studies

In accordance with Rule G21A (b), the minimum duration for this will be three (3) years of registered study and the maximum duration will be five (5) years of registered study, including any periods of WPBL. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration. (Please note that this rule is necessary to comply with the South African Dental Technicians Council Rules as per the Dental Technicians Act, 1979 (Regulations regarding the training of student Dental Technicians, No. 21 (4) w.e.f 23 February 2001.)

4.3.8. Materials Purchases

Students are supplied with materials for practical training.

Students are required to purchase additional materials for repeat practical exercises. Money for purchasing materials must be deposited into the official Durban University of Technology bank account, account number FDTs 301374. A duplicate receipt is to be requested from the cashier, which then needs to be presented to the Senior Technical Assistant who will process the payment on the internal departmental system. DUT is a cashless environment. At no point are you to hand cash to anyone in the university other than the cashiers.

Note: Students are also responsible for the purchase of personal equipment and instruments, which are needed to complete practical tasks. The table below reflects the estimated cost of equipment and instruments for personal use.

DENTAL TECHNOLOGY : STUDENT EQUIPMENT			
ECP	1st YEAR	2nd YEAR	3rd & 4th YEARS
HAND TOOLS	HAND TOOLS	HAND TOOLS	HAND TOOLS
Micro Motor	Micro Motor	Micro Motor	Micro Motor
Micro Torch	Micro Torch	Micro Torch	Micro Torch
Ash Carver No. 5	Ash Carver No. 5	Ash Carver No. 5	Ash Carver No. 5
Apex Carver Lecron Round	Apex Carver Lecron Round	Apex Carver Lecron Round	Apex Carver Lecron Round
Scalpel Handle	Scalpel Handle	Scalpel Handle	Scalpel Handle
Scalpel Blade	Scalpel Blades (5 per student)	Scalpel Blades (5 per Student)	Scalpel Blades (5 per Student)
Wax Knife Large	Wax Knife Large	Wax Knife Large	Wax Knife Large
Plaster	Plaster Knife	Plaster Knife	Plaster Knife
Plaster Spatula	Plaster Spatula	Plaster Spatula	Plaster Spatula
Pk Thomas Carver	Pk Thomas Carver	Pk Thomas Carver	Pk Thomas Carver
		Wax Dropper	Wax Dropper
			Porcelain Separator
			Artery Forceps
		Measuring Gauge for metal	Measuring Gauge for metal
			Glass Slab
			Porcelain Brush No.6, No.2
		Penpoint trimmer	Penpoint trimmer
BURS	BURS	BURS	BURS
Cross Cut Bur - Dentures	Cross Cut Bur - Dentures	Cross Cut Bur - Dentures	Cross Cut Bur - Dentures
S/Steel Rosehead Bur	S/Steel Rosehead Bur	S/Steel Rosehead Bur	S/Steel Rosehead Bur
Sandpaper Mandrel	Sandpaper Mandrel	Sandpaper Mandrel	Sandpaper Mandrel
Mandrel Screw Type	Mandrel Screw Type	Mandrel Screw Type	Mandrel Screw Type
Plaster Bur	Plaster Bur	Plaster Bur	Plaster Bur
Pear Shape Carbide Bur	Pear Shape Carbide Bur	Pear Shape Carbide Bur (2 per Student)	Pear Shape Carbide Bur (2 per Student)
Tungsten Fissure Bur	Tungsten Fissure Bur	Tungsten Fissure Bur (2 per Student)	Tungsten Fissure Bur (2 per Student)

	Mandrel Screw Type Heavy Duty	Mandrel Screw Type Heavy Duty (2 per Student)	Mandrel Screw Type Heavy Duty (2 per Student)
		Cutting Disc	Cutting Disc
		Tungsten Carbide Cross Cut Parallel	Tungsten Carbide Cross Cut Parallel
		Stone Grinder (Parallel)	Stone Grinder (Parallel)
		Diamond Burs (Parallel, Pointed & Tapered)	Diamond Burs (Parallel, Pointed & Tapered)
POLISHING EQUIPMENT	POLISHING EQUIPMENT	POLISHING EQUIPMENT	POLISHING EQUIPMENT
linen pumice wheel (4 x 42)	linen pumice wheel (4 x 42) (2 per student)	Linen. Lathe Brush Calico interleaved with Fino 3 Rows pumice wheel (4 x 42) (2 per student)	linen pumice wheel (4 x 42) (2 per student)
Calico Lathe Wheel	Calico Lathe Wheel	Calico Lathe Wheel.	Calico Lathe Wheel
	Rubber Cones For Denture Work (Pack of 6)	Rubber Cones For Denture Work (Pack of 6)	Rubber Cones For Denture Work (Pack of 6)
Rubber Cone (Lollipop)	Rubber Cone (Lollipop) (pack of 6)	Rubber Cone (Lollipop) (Pack of 6)	Rubber Cone (Lollipop) (Pack of 6)
Muslin Buff	Muslin Buff (2 per student)	Muslin Buff (2 per Student)	Muslin Buff (2 per Student)
	Felt Polishing Cone	Felt Polishing Cone	Felt Polishing Cone
			Metal Centred Pumice Brush
		White Rubber wheels	White rubber wheels
		Black Rubber wheels	Black rubber Wheels

GENERAL	GENERAL	GENERAL	GENERAL
Rubber Mixing Bowl (Acrylic Resimix Large)	Rubber Mixing Bowl (Acrylic Resimix Large)	Rubber Mixing Bowl (Acrylic Resimix Large)	Rubber Mixing Bowl (Acrylic Resimix Large)
Rubber Mixing Bowl (Plaster Large Green)	Rubber Mixing Bowl (Plaster Large Green)	Rubber Mixing Bowl (Plaster Large Green)	Rubber Mixing Bowl (Plaster Large Green)
Robinson Soft Brush	Robinson Soft Brush	Robinson Soft Brush (pack of	Robinson Soft Brush (pack of 12)

(pack of	(pack of 12)	12)	
150mm Ruler Stainless Steel	150mm Ruler Stainless Steel	150mm Ruler Stainless Steel	150mm Ruler Stainless Steel
Spring Dividers 100mm	Spring Dividers 100mm	Spring Dividers 100mm	Spring Dividers 100mm
Paint Scrapers 100mm	Paint Scrapers 100mm	Paint Scrapers 100mm	Paint Scrapers 100mm
Goggles Safety	Goggles Safety	Goggles Safety	Goggles Safety
Diagonal Cutters (Side Cutters)	Diagonal Cutters (Side Cutters)	Diagonal Cutters (Side Cutters)	Diagonal Cutters (Side Cutters)
Paint Brush 8mm	Paint Brush 8mm	Paint Brush 8mm	Paint Brush 8mm
Water Paper (800 and 1000 grit)	Water Paper (800 and 1000 grit)	Water Paper (800 and 1000 grit)	Water Paper
Protractor	Protractor	Protractor	Protractor
	hand/medium size towel	hand/medium size towel	hand/medium size towel
	mechanical pencil (coloured lead)	mechanical pencil (coloured lead)	mechanical pencil (coloured lead)
	Tipex	Tipex	Tipex
Long sleeve, long length white lab coat	Long sleeve, long length white lab coat	Soldering Tweezers	Soldering Tweezers
Tub of petroleum jelly	Tub of petroleum jelly	Ortho Pliers (Round/LONG Nose) (ASH UK 64 OR 65)	Ortho Pliers (Round Nose)
		Ortho Pliers (ADAM'S PLIERS ASH UK 64/65)	Ortho Pliers (Long Nose)
		Wire Cutters	Wire Cutters
		Snapper Articulator	Snapper Articulator
			Porcelain Kit
			Flasks

4.3.9 Vaccinations

The Department will facilitate a mandatory Hepatitis B vaccination for first time entering students. Should a student miss a vaccination, the student is liable to acquire the vaccination at his/her own cost. The Department will also facilitate vaccination for Covid-19, where applicable. Students must comply with the scheduled appointments as there needs to be an immunity period of three weeks in between the Covid-19 vaccine and the Hepatitis B vaccine. Therefore full disclosure of the Covid-19 vaccination status is essential.

5. NATIONAL DIPLOMA: DENTAL TECHNOLOGY: EXTENDED CURRICULUM PROGRAMME (ECP) (NDDTFI)

5.1 Programme Information

This department offers an Extended Curriculum learning programme for the ND: Dental Technology. On the basis of the placement assessments, successful applicants for study towards the National Diploma will be accepted into either the three-year minimum; or an augmented, four-year minimum study periods. An augmented, Extended Curriculum has been devised to enhance student development and to improve the student's chances of successful completion. This qualification is not aligned to the HEQSF and is thus in the process of being phased out.

5.2 LEARNING PROGRAMME STRUCTURE

Code	Subjects	NQF Level	CA/E*	DoE Credits	SAQA Credits	Pre-requisite
Study Level 1						
CMCA102	Communication I	6	CA	0.020	9.6	Admission requirements
OANA101	Oral Anatomy I	6	CA	0.040	9.6	
TMOR101	Tooth Morphology I	6	CA	0.040	9.6	
IADT112	Introduction to Applied Dental Technology (Year 1)	6	CA	0.300	9	
IADT122	Introduction to Applied Dental Technology I (Year 2)	6	CA	0.100	9	Introduction to Applied Dental Technology (Year 1)
DDRC101	Dental Drawings and Carvings	6	CA	0.280	11	Admission Requirements
DCLT101	Dental Computer Literacy	6	CA	0.220	6	
DMSC102	Dental Materials Science I	6	CA	0.250	42	Introduction to Applied Dental Technology (Year 1), Dental Drawings and Carvings Dental Computer Literacy
DTTH101	Dental Technology Theory I	6	CA	0.150	28.8	
APDT101	Applied Dental Technology I	6	CA	0.100	20.4	
PHCD111	Physics & Chemistry I (Mod 1)	6	E	0.050	7	
PHCD121	Physics & Chemistry I (Mod 2)	6	E	0.050	15	
Study Level 2						
DMSC211	Dental Materials Sciencell (Module 1)	6	E	0.145	24	Dental Materials Science I, Dental Technology I
DMSC221	Dental Materials Science II (Module 2)	6	E	0.145	24	Dental Materials Science II (Mod I)
DTTH211	Dental Technology Theory II (Mod 1)	6	CA	0.080	15	Dental Technology Theory I
DTTH221	Dental Technology Theory II (Mod 2)	6	CA	0.080	15	Dental Technology Theory I
APDT201	Applied Dental Technology II	6	CA	0.180	30	Tooth Morphology I Applied Dental Technology I Introduction to Applied
JURI111	Jurisprudence I (Module 1)	6	E	0.050	6	
JURI121	Jurisprudence I (Module 2)	6	E	0.050	6	Jurisprudence I (mod 1)
Study Level 3						
BPRD101	Business Practice I	6	CA	0.100	12	
DMSC301	Dental Materials Science III	6	CA	0.250	42	Dental Materials Science II Oral Anatomy

DTTH311	Dental Technology Theory III (Mod 1) (Crown/Bridge & Orthodontics)	6	CA	0.095	16.8	Dental Technology Theory II (Mod 1) (Crown/Bridge & Orthodontics) Oral Anatomy
DTTH321	Dental Technology Theory III (Mod 2) (Chrome & Prosthetics)	6	CA	0.095	16.8	Dental Technology Theory II (Mod 2) (Chrome & Prosthetics), Oral Anatomy

* CA= Continuous Assessment; E = Examination at end of Subject / Module.

5.3 PROGRAMME RULES

5.3.1 Minimum Admission Requirements

In addition to Rule G7 the minimum entrance requirement for entry into the programme of study is a National Senior Certificate (NSC) with endorsement for degree entry with the following subjects:

Subject	NSC Rating
English (home) OR English (1st additional)	3
Physical Sciences OR	3
Mathematics OR	3
Mathematics Literacy	6
And two 20 credit subjects (not more than one language)	3

The minimum requirement for holders of the Senior Certificate is matriculation exemption with the following subjects at the stated ratings:

Compulsory Subjects	HG	SG
Mathematics OR Physical Science	E	C

The latter also applies to NC (V) level four (4) candidates.

The DUT General Rules G7 (3) will apply for admission requirements based upon Work Experience, Age and Maturity and Recognition of Prior Learning. The DUT's Admissions Policy for International Students and General Rules G4 and G7 (5) will apply for admission of International students.

5.3.2 Selection Criteria

In accordance with Rule G5, acceptance into the programme is limited to 29 places. As more qualifying applications are received than can be accommodated, the following selection process will determine placement in the programme:

All applicants must apply through the Central Applications Office (CAO). Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 12 June / trial marks will be used for current matriculants) together with a submission of a portfolio. Shortlisted students will then be invited to undergo placement testing. Applicants who pass the placement tests are invited for an interview. Provisional acceptance is given to selected applicants awaiting National Senior Certificate (NSC) results. If the final Grade 12 NSC results do not meet the minimum entrance requirements, this provisional acceptance will be withdrawn. Final selection for placement will be based on results in the SC / NSC and DUT placement tests.

5.3.3 Pass Requirements

Students registered in the extended curriculum programme will only be eligible for subsequent registration provided that:

5.3.3.1 A student passes 5 out of the 6 registered subjects.

5.3.3.2 A student passes the following 3 of the 6 subjects:

- Introduction to Applied Dental Technology (IADT101),
- Dental Computer Literacy (DCLT101),
- Dental Drawings and Carvings (DDRC101)

NOTE: The specific rules for ND: Dental Technology (ECP) are stipulated above. In addition, the rules pertaining to the ND: Dental Technology under section 4.3.3 to 4.3.9 apply.

9. MASTER OF HEALTH SCIENCES TECHNOLOGY: DENTAL TECHNOLOGY (MHDNT1)

9.1 PROGRAMME INFORMATION

This full research qualification is aligned to Rule G24 in the General Student Handbook. This 180 credits qualification is offered at NQF level 9. The student will conduct independent research under guidance in Dental Technology, and contribute to knowledge production in that field. The research problem, its justification, process and outcome is reported in a dissertation, which complies with the generally accepted norms for the research at that level. Ultimately, the graduate will make a valuable contribution to the existing body of knowledge and initiate change that will help to develop and advance the profession of Dental Technology. *The minimum duration of the programme is one (1) of study and the maximum duration is three (3) years of study.*

9.2 PROGRAMME RULES

9.2.1 Admission Requirements

In accordance with Rule G5 in the General Student Handbook, acceptance into the programme is limited, and entry into the Master of Health Sciences programme is not automatic. In addition to Rule G24 (1), candidates must be in possession of a Bachelor's Degree in Dental Technology or an equivalent qualification, or have been granted status or advanced standing according to Rule G10. All international applicants need to have their qualifications evaluated by the South African Qualifications Authority (**SAQA**).

Furthermore, the applicant needs to complete all internal applications and selection processes as required by the Department's Research Committee.

9.2.2 Pass Requirements

Please refer to Rule G24.

9.2.3 Re-registration Rules

Rule G24 (2), Rule G26 (5) and the General Student Handbook.

9.2.4 Exclusion Rules

Rule G24 (1)(d); Rule G24 (2), and the General Student Handbook.

9.2.5 Interruption of Studies

In accordance with Rule G24, the minimum duration for this programme will be one (1) year of registered study and the maximum duration will be three (3) years of registered study. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration.

The applicant also needs to complete all internal application processes as required by the department's research committee.

10. DOCTOR OF DENTAL TECHNOLOGY (DDentalTech)

10.1 PROGRAMME INFORMATION

This research intensive qualification is aligned to Rule G25 in the General Student Handbook. This 360 credits qualification is offered as NQF level 10. The degree of Doctor of Dental Technology is awarded on the basis of the submission of a thesis. The thesis should provide evidence of the student: Being able to make an original and substantial contribution to the body of knowledge through the use of appropriate research principles and methods; Gaining knowledge and skills needed to apply scientific research methods independently and critically; Demonstrating competence in technical skills relevant to Dental Technology, and high level or personal autonomy, commitment and accountability in the design and execution of research; Think globally and consider issues from a variety of perspectives and apply international standards and practices within Dental Technology; and Demonstrating principles of ethical reasoning and professional responsibility. The thesis must comply with the normal technical requirements and rules with regard to scope, quality and layout.

10.2 PROGRAMME RULES

10.2.1 Minimum Admission Requirements

In addition to Rule G25 (1) in the General Student Handbook, persons must be in possession of a Master of Health Sciences in Dental Technology or equivalent, or have been granted status or advanced standing according to Rule G10. Please also refer to the Postgraduate Student Handbook.

Furthermore, the applicant needs to complete all internal application and selection processes as required by the Department's Research Committee.

10.2.2 Pass Requirements

Refer to Rule G25 (4) in the General Handbook for Students

10.2.3 Re-registration Rules

Please refer to Rule G26 (5) and the Postgraduate Student Handbook.

10.2.4 Exclusion Rules

Please refer to Rules G25 (2) (B; C (ii)) in the General Student Handbook.

10.2.5 Interruption of Studies

In accordance with Rule G25 (2), the minimum duration for this programme will be two (2) years of registered study and the maximum duration will be four (4) years of registered study. Should a student interrupt their studies by more than three (3) years, the student will need to apply to the department for permission to reregister and will need to prove currency of appropriate knowledge prior to being given permission to continue with registration. Please refer to the Postgraduate Student Handbook.

SECTION B: DENTAL ASSISTING

11. HIGHER CERTIFICATE: DENTAL ASSISTING (HCDNA1) [Full Time: One Year Qualification]

11.1 Programme Information

Certain subjects in this qualification do not have a final examination. The results for these subjects are determined through a weighted combination of assessments. As such, there are no supplementary examinations. Students are encouraged to work steadily through the period of registration in order to achieve the highest results possible. Assessment details are listed under each subject at the back of this handbook. Moderation follows the DUT requirements.

11.2 LEARNING PROGRAMME STRUCTURE

Code	Subjects	HEQSF Level	SAQA Credits	Year of Study	Credits Nated	CA/E*
CSTN101	Cornerstone			1	.094	E
DAPA101	Dental Assisting Practical 1A			1	.093	CA
DATA101	Dental Assisting Theory 1A			1	.126	CA/ E
DNPM101	Dental Practice Management			1	.094	E
OAPA101	Oral Anatomy and Pathology 1A			1	.093	CA/ E
DACP101	Dental Assisting Clinical Practice			1	0125	CA
DAPB101	Dental Assisting Practical 1B			1	.093	CA
DATB101	Dental Assisting Theory 1B			1	.126	CA/ E
OAPB101	Oral Anatomy and Pathology 1B			1	.093	CA/ E

PHDA101	Pharmacology for Dental Assisting		1	.063	CA/ E
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* CA —Continuous assessment / E—Examination

11.3 PROGRAMME RULES

11.3.1 Minimum Admission Requirements

In addition to Rule G7 the following apply:

The minimum entrance requirement for entry into programme: Higher Certificate in Dental Assisting is a National Senior Certificate (NSC), a Senior Certificate or a National Certificate (Vocational) (NC(V)), and must include the following subjects at the stated minimum ratings below:

Subject	NSC Rating
English (home) OR English (1st additional)	3
Life Sciences OR Physical Sciences	3
Mathematics OR Mathematics Literacy	3 5
and two 20 credit subjects, of which not more than one may be a language	3

The minimum requirement for holders of the Senior Certificate into the programme: Higher Certificate in Dental Assisting is matriculation exemption with the following subjects at the stated ratings:

Compulsory Subjects	HG	SG
English	E	C
Mathematics	E	C
Biology OR Physical Science	E	C
and two 20 credit subjects, of which not more than one may be a language	E	C

11.3.2 Selection Procedures

In accordance with Rule G5, acceptance into the programme is limited to seventy five (75) places. As more qualifying applications are received than can be accommodated, the following selection process will determine placement in the programme:

All applicants must apply through the Central Applications Office (CAO). Preference is given to those who have Dental Assisting as their first choice. Initial shortlisting for selection is based on the applicant's academic performance in Grade 12 (Grade 11 or Grade 12 Trial marks, will be used for current matriculants).

All applicants that meet the above requirement will be notified and will be required to complete and submit documentation to the Dental Assisting Programme.

Applicants who are successful following the interview will then be ranked according to the table below:

Assessment	Weighting
Results of the NSC, SC or NC(V) certificate	50%
Certificate of attendance from a dental surgery	10%
Submitted documentation	10%
Interview	30%

Shortlisted candidates will be invited to undergo placement testing. Applicants who pass the placement tests are invited for an interview.

Provisional acceptance is given to selected applicants awaiting National Senior Certificate (NSC) results. If the final Grade 12 NSC results do not meet the minimum entrance requirements, this provisional acceptance will be withdrawn.

Final selection for placement will be based on results in the SC / NSC and DUT placement tests.

11.3.3 Pass Requirements

Notwithstanding the DUT pass requirements (G14 and G15), students are encouraged to apply themselves to their learning, and strive for the best academic results possible in order to adequately prepare themselves for their future careers, and to maximize possible employment opportunities.

11.3.4 Uniform

It is compulsory for all students to wear the prescribed uniform. Failure to do so will result in disciplinary action. Dental Assisting students are expected to be appropriately attired when attending clinical sessions. This includes the use of gloves, masks, eyewear, gowns, etc.

11.3.5 First Aid Certificate

Students shall not be permitted to graduate unless they are in possession of a current Level 2 First Aid Certificate at the time of completing the Dental Assisting programme. The first aid certificate will be arranged and paid for by the programme. Students missing the course for any reason will be expected to obtain the required certificate at their own cost and in their own time.

11.3.6 Hepatitis B

All students registered for the programme are required to complete a course of Hepatitis B inoculations arranged and paid for by the department.

11.3.7 Duration of Programme

In accordance with the DUT Rule G20B*, minimum duration is one year of registered study, including any periods of clinical practice and maximum duration will be two years including any periods of clinical practice.

11.3.8 Exclusion Rules

In addition to the DUT General Rule G17*, a student who fails 50% or more of the subjects registered in the initial year of study with a final mark of less than 40% in the failed subjects will not be permitted to re-register in Dental Assisting programme. De-registration from any subject is subject to the provisions of Rule G6 (2)*.

11.3.9 Interruption of Studies

Should a student interrupt their studies for a period of more than two (2) consecutive years, the student will need to apply to the department for permission to re-register and will need to prove currency of appropriate knowledge and skills prior to being granted permission to continue with registration.

12. SUBJECT/MODULE CONTENT AND ASSESSMENTS

NB: Students are to read this section in conjunction with the relevant study guide.

ND: DENTAL TECHNOLOGY &

ND: DENTAL TECHNOLOGY EXTENDED PROGRAMME (ECP)

ORAL ANATOMY (OANA101)

Assessment Plan

Assessments - 90%

Assignments - 10%

Topics Covered

Introduction to oral anatomy. Surface anatomy. The mucous membrane.

The human skull, including the Maxillae, Mandible and their relationship to the teeth.

The Temporomandibular joint.

Muscles. Border movements of the mandible. The salivary glands. Diseases of the oral cavity.

Nerves.

Blood supply to the oral cavity. Lymphatic drainage of the Head and Neck. Dental histology.

TOOTH MORPHOLOGY (TMOR101)

Assessment Plan

Assessments - 90%

Assignments/Practica Tasks - 10%

Topics Covered

Dental Morphological Terminology. Permanent maxillary incisors. Permanent mandibular incisors. Permanent canines.

Permanent maxillary premolars. Permanent mandibular premolars, Permanent maxillary molars.

Permanent mandibular molars. Tissues of the teeth and pulp cavities of permanent teeth.

Oral anatomy related to oral function. Chewing. Occlusion and malocclusion. The primary dentition.

Dental anomalies. Forensic Dentistry.

APPLIED DENTAL TECHNOLOGY I (APDT101)

Assessment Plan

Class work - 10%

Assessments - 90%

Topics Covered

The handling of gypsum products and wax products, Pouring, trimming and finishing of models, Special (custom) trays. Occlusal rims. Articulation. The setting up of artificial teeth and festooning, Post-Dams. Flasking, packing and polishing. Selective grinding. Acrylic denture repairs,

APPLIED DENTAL TECHNOLOGY II (APDT201)

This subject consists of four discipline-specific areas of equal weighting namely:

Crown & Bridge, Orthodontics, Cobalt Chrome & Prosthetics.

Assessment Plan

Class work - 10%

Assessment - 90%

A 40% subminimum mark per discipline (**Crown & Bridge, Orthodontics, Prosthetics and Chrome**) is required and a final pass mark of 50%, and above, is needed to pass this subject overall.

Laboratory based Content Covered:

Prosthetics

Aesthetically functional denture set-ups. Complete upper or lower denture against opposing natural teeth.

Insertion of palatal and other strengtheners. Technique for Clear palate dentures. Resilient denture bases.

Denture Inlays. Basic acrylic partial denture cases. Clinical cases.

Cobalt Chrome

Removable partial dentures, Construction of chrome cobalt partial dentures with the emphasis on survey and block out.

Orthodontics

Diagnostic models, Springs for mesiodistal movement, Springs for buccal movement, Springs for labs lingual movement

Springs for reduction of overjet & alignment of incisors, Base plate and bite planes, Screw type appliances, Clasps

Crown and Bridge

Pin, Base & ditching of models, Working casts and dies, Wax Patterns, Spring, investing, casting and finishing, Posts, Soldering and constructing a three-unit full metal bridge, Metal Inlays/Onlays
Temporary Crowns

APPLIED DENTAL TECHNOLOGY III (APDT301)

Assessment Plan

Class work - 10%

Assessment - 90%

A 50% subminimum mark per discipline (**Crown & Bridge, Orthodontics, Prosthetics and Chrome**) is required and a final pass mark of 50%, and above, is needed to pass this subject overall.

Laboratory based Content Covered:

Prosthetics

Semi-adjustable articulator. Fully balanced occlusion. Denture characterisation. Immediate dentures. Denture duplication. Partial dentures. Class II and Class III malocclusion.

Overdentures tooth and implant supported. Splints, stents and surgical templates. Clinical cases, Maxillofacial: Obturators and variations.

Cobalt Chrome

Removable partial dentures, Construction of chrome cobalt partial dentures with the emphasis on casting, working off, and fitting cobalt chrome dentures. A brief overview of acrylic work on cobalt chrome dentures.

Orthodontics

Spring and screw expansion appliances, Habit preventers, Advanced orthodontic springs
Intermaxillary and extra oral traction, Fixed orthodontic appliances, Mouth guards

Crown and Bridge

Fixed bridges in porcelain. Bridge design. Pontics and connectors. Spruing, investing, casting and finishing. Posts Retained bridges. The cast metal ceramic crown and bridge design. Cast metal ceramic crown and bridge construction. Porcelain application and repair techniques. Porcelain application to single units. Porcelain margin application.

DENTAL MATERIALS SCIENCE I (DMSC I02)

Assessment Plan

Assessment - 65%

Assignments - 35%

Topics Covered

History of Dental Technology. Introduction to dental materials and their properties, Gypsum products, Impression materials, Denture base resins, Waxes, Separating media. Denture cleaners, Dental Instruments, Abrasion and polishing.

DENTAL TECHNOLOGY THEORY I (DTTH I01)

Assessment Plan

Assessment - 90%

Assignments - 10%

Theory Content Covered

Introduction to false teeth. Introduction to removable prosthodontic techniques. Landmarks of the edentulous mouth. Preliminary impressions and casts. Anatomical changes associated with the loss of teeth. Special/custom trays. Master/final/secondary casts/models. Occlusal rims. Articulators, Artificial tooth arrangement. Festooning (waxing up). Post-Dams, Retention, stability and support of complete dentures. Flasking & packing complete dentures. Selective grinding. Pumicing and polishing of dentures. Acrylic repairs. Speech

DENTAL TECHNOLOGY THEORY II (DTTH 21 I/22I)

Assessment Plan

Assessment - 90%

Presentation & Assignments - 10%

Topics Covered

Crown and Bridge

Introduction to fixed restorations, Crown & Bridge Systems, Crown & Bridge wax-up, Sprue, Invest & Casting metal crowns, Different types of margin preparations, Occlusal arrangement/Pathological Occlusion, Occlusal interferences
Porosity, Bridges, Design principles of posts, Temporary crowns & Metal inlays, Technological advancements in Crown & Bridge

Orthodontics

Introduction, Definition of orthodontics, Orthodontic stainless steel and stainless steel wire
Orthodontic appliance and removable appliances, Normal occlusion and morphology of normal occlusion

Occlusal and orthodontic forces, Development of primary and permanent dentition, Tissue changes

Malocclusion of teeth, Classification of malocclusion, Anchorage force and retention
Principles of orthodontic treatment, Case discussions

Cobalt Chrome

Removable partial dentures, Advantages of a metal partial denture. Brief overview of the components of a RPD.

Classification of RPD. Introduction to design of RPD. An in-depth study of major connectors. An in-depth study of rests. An in-depth study on retainers. Guide plates and acrylic retentions.

Prosthetics

Terminology related to Complete Denture Prosthetics. Model analyses. Complete Denture Occlusion. Aesthetics in dentures.

Palatal and other strengtheners. Clear palates. Resilient denture bases.

Inlays for artificial teeth. Saving materials in the dental laboratory.

DENTAL TECHNOLOGY THEORYIII (DTTH 311/321)

Assessment Plan

Assessment - 90%

Presentation & Assignments 10%

Theory Content Covered

Crown and Bridge

Introduction to fixed bridges. Biomechanics of fixed bridge. Bridge design and abutment selection. Cantilever Bridges, Tilted molar abutment. Pontics and connectors. Margin design. Spruing, investing, casting and finishing. Soldering and brazing metal ceramic bridges. Bridges. Temporary restorations.

Introduction to metal ceramics. Cast metal ceramic crown and bridge design (Optimizing aesthetics).

Cast metal ceramic crown and bridge construction. Porcelain application. Reducing stress in porcelain.

Diagnostic set-ups. Color in Ceramics

Orthodontics

Neuromuscular development of normal occlusion, Preventive orthodontics, Interceptive orthodontics, Habit breakers. Fixed appliances, Soldering and welding of stainless steel, Case discussions

Cobalt Chrome

Removable partial dentures, Duplicating. Spruing. Investing. Heating the muffle (Burn-Out).

Casting: Induction and flame. Constituents of a chrome cobalt alloy. Working off.

Electro polishing. Finishing the RPD. Fitting the RPD. Miscasts. Casting defects. Indirect Retention.

Preparation of the remaining dentition.

The RPI Bar concept. R.P.A. clasp systems.

Prosthetics

Semi-adjustable articulator. Fully balanced occlusion. Denture characterization, Immediate dentures. Denture duplication. Partial dentures. Class II and Class III malocclusion. Clinical cases. Overdentures tooth & implant supported. Splints, stents and surgical templates. Clinical cases.
Maxillofacial, Obturators and variations. Fractures of the facial bones.

INTRODUCTION TO APPLIED DENTAL TECHNOLOGY (IADT 112)

Assessment Plan

Theory	50%
Practical	50%

Topics Covered

Intro to Dental Theory, Gypsum products, Impressions, Models, Wax products, Special trays

DENTAL COMPUTER LITERACY (DCLT101)

Assessment Plan

Theory	80%
Library Literacy	20%

Topics Covered

Hardware, Software, Word Processing, Electronic Information Systems, Spreadsheets, World Wide Web

DENTAL DRAWINGS AND CARVINGS (DDRC101)

Assessment Plan

Tests	50%
Projects	50%

Topics Covered

Form, Drawing basic forms, Perspective drawing, Object drawing, (manmade and mechanical objects) Drawing of animal bones, drawing teeth, carving teeth in clay, carving teeth in wax.

COMMUNICATION (CMCA102)

The Assessment Plan

Test 1	25%
Test 2	25%
Assignment 3	25%
Test 4	25%
Examinations	25%

Topics Covered

Communication skills and professionalism. Assertive behaviour. Confidence in speaking. Appropriate and effective body language. Active listening. Writing skills. Reading skills. Effective communication.
Self-image and interpersonal relations. Conflict resolution skills. Negotiations. Inter-cultural communication.

BUSINESS PRACTICE I (BPRD101)

Assessment Plan

Theory Tests	40%
Examinations	60%

Topics Covered

Human Resources Management, Effective time utilization. Set up and maintain administrative systems.

Application of an applicable software programmes. Develop and use interactive skills. Industrial relations.

Establish goals (Self and organization). Problem solving and decision making. Conflict management.

Negotiation skills. Crisis management. Assertive behaviour. Performance Management, Labour Relations Act.

Health and Safety Act. Basic Conditions of Employment

Accounting, Basic accounting, Transactions and the accounting equation, Accounting definitions
Income statement and balance sheet, Analysis and interpretations, Bank reconciliation, Cash flows.

DENTAL MATERIALS SCIENCE II (DMSC211/221)

Assessment Plan

Theory Tests & Assignment	40%
Examinations	60%

Topics Covered

Elastic impression materials. Die materials. Casting Waxes. Casting Investments, Metal solidification & microstructure. Constitution of alloys. Casting procedures for dental alloys. Dental Casting alloys.

Electro polishing, Tarnish and corrosion, wrought metal alloys, Soldering and Welding, Rebase materials.

DENTAL MATERIALS SCIENCE III (DMSC301)

Assessment Plan

Assessment	80%
Presentation & Assignments	20%

Topics Covered

All ceramics. Platinum foil & refractory die materials for ceramic restorations. Heat Treatment, Thermoplastic materials.

Evaluation of articles and assignments, Osseointegration dental implant materials, Health factors in a dental laboratory

Porcelain, Noble metal - ceramic alloys, Base metal - ceramic alloys, Biological response to dental materials.

Bonding of ceramics

Selection and evaluation of metal ceramic casting alloys, Application of dental materials, Trouble-shooting

JURISPRUDENCE I (JURI 111/121)

Assessment Plan

Theory Tests and assignment	40%
Examinations	60%

Topics Covered

Objectives, functions and powers of the SADTC, Education, training and registration of Dental Technicians and laboratory.

Offences and the control over artificial teeth, Disciplinary powers of the Council

General and supplemental provisions, Regulations of the Council, Adherence to moral standards

Professional ethics code, Professional Image. Other legislative Laws and Acts that pertain to employed Dental Technicians, continuous professional development forms of ownership.

PHYSICS AND CHEMISTRY I (PHCD 111/121)

Assessment Plan (Physics)

Theory Tests 40%

Examinations 60%

Topics Covered

Introduction to Mechanics, Units, standards and measurements, Vectors, Motion, Introductory Kinematics

Equations of motion, Forces, Newton's Laws of Motion, Statics, Torque, Levers in the body:

Dental Applications

Equilibrium, Elastic Properties of Matter, Stress and Strain, Hooke's Law, Young's Modulus, Ultimate Strength

Shearing, Basic Fluid Mechanics, Density, Pressure, Viscosity, Equation of Continuity,

Archimedes' Principle

Thermal Properties of Matter, Heat and Temperature, Temperature scales, Heat Transfer,

Thermal Expansion

Specific Heat Capacity, Latent Heat, Light, Nature of Light, Reflection and Refraction, Dispersion, Colour

Assessment Plan (Chemistry)

Theory Tests 40%

Examinations 60%

Topics Covered

Matter. Chemical Equations and Stoichiometry. Solutions. Chemical Reactions. Reaction Rates

HIGHER CERTIFICATE IN DENTAL ASSISTING

NB: Students are to read this section in conjunction with the relevant study guide

SEMESTER I

DENTAL ASSISTING THEORY IA (DATA101)

Assessment Plan

Theory Tests 40%

Examination 60%

Topics Covered

Infection Control; Pain Control, Dental Materials, Radiography

DENTAL PRACTICE MANAGEMENT (DNPM101)

Assessment Plan

Theory Tests 40%

Examination 60%

Topics Covered

Patient Management, Practice Management, Ethics and Jurisprudence Office
Technology and Management - (Theory and Practical)

ORAL ANATOMY AND PATHOLOGY IA (OAPAI01)

Assessment Plan

Theory Tests 40%

Examination 60%

Topics Covered

Microbiology, Oral Anatomy
and Physiology

DENTAL ASSISTING PRACTICAL IA (DAPAI01)

Assessment Plan

Clinical Exams 50%

Practical Tests 50%

Topics Covered

Surgery Orientation; Dental Equipment and Dental Instruments; Four Handed Dentistry;
Clinical Procedures (including specialties); Clinical Asepsis; Radiographic Procedures

CORNERSTONE 101 (CSTN101)

The Cornerstone module is compulsory for all undergraduate students. The purpose of this module is to induct students into the community of higher education, with values and practices that promote self-awareness, social justice and environmental sustainability

Assessment Plan

TBC

SEMESTER 2

DENTAL ASSISTING THEORY IB (DATBI01)

Assessment Plan

Theory Tests 40%

Examination 60%

Topics Covered

Nutrition, Oral Hygiene, Conservative Dentistry, Dental Specialities

ORAL ANATOMY AND PATHOLOGY IB (OAPBI01)

Assessment Plan

Theory Tests 40%

Examination 60%

Topics Covered

Oral Pathology

Medical Emergencies

Cariology

DENTAL ASSISTING PRACTICAL IB (DAPBI01)

Assessment Plan

Clinical Exams 50%

Practical Tests 50%

Topics Covered

Surgery Orientation; Dental Equipment and Dental Instruments; Four Handed Dentistry; Clinical Procedures (including specialties); Clinical Asepsis; Radiographic Procedures

DENTAL ASSISTING CLINICAL PRACTICE (DACP101)

Assessment Plan

Work Integrated Learning hours 30%

Clinical Feedback 20%

Practical Tests 50%

Topics Covered

Surgery Orientation; Dental Equipment and Dental Instruments; Infection Control Practice; Radiographic Practice.

Work Integrated Learning is a compulsory component of this module and the student is required to attend an accredited dental practice to obtain (200) as well as meeting certain outcomes as specified in the Study guide for this module.

PHARMACOLOGY FOR DENTAL ASSISTING (PHDA101)

Theory Tests 40%

Examination 60%

E & OE