The above department offers two programmes:

DENTAL TECHNOLOGY
DENTAL ASSISTING

This handbook offers information on both programmes
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 G1 (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.
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 behavior

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
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   10.3.8 Exclusion Rules
   10.3.9 Interruption of Studies
10.4 Subject Content
I. DEPARTMENTAL & FACULTY CONTACT DETAILS

All departmental queries to:

Secretary: Mrs Rani Sukhu
Tel No: (031)-3732044
Fax No: (031)-3732047
Email: sukhui@dut.ac.za
Location of Department Gate 8, Steve Biko Rd, Ritson Campus, Mansfield School

Admin Assistant:
(Dental Assisting) Ms Kerusha Pillay
Tel No: (031)-3735356
Fax No: (031)-3736401
Email: kerushap@dut.ac.za
Location of Department Main Gate, ML Sultan Rd, ML Sultan Campus, AH0005C

Clinic Receptionist/
Dental Assistant: Mrs B Majola
Tel No: (031)-3732439
Fax No: (031)-3736401
Email: bongekileb@dut.ac.za

All Faculty queries to:

Faculty Officer: Ms Fortunate Thembelihle Mayisela
Tel No: (031)-3732701
Fax No: (031)-3732407
Email: thembim@dut.ac.za
Location: Health Sciences Faculty Office, Gate 8, Steve Biko Road, Mansfield Site Area, Ritson Campus

Executive Dean: Professor N Sibiya
Executive Dean’s Secretary: Mrs Bilkish Khan
Tel No: (031)-3732704
Fax No: (031)-3732620
Email: bilkishk@dut.ac.za
Location: Executive Dean’s Office, 8, Steve Biko Road, Mansfield Site Area, Ritson Campus
2. STAFFING

Head of Programmes
Mrs S Naidoo, Master of Applied Sciences (MRT)(Uni-Syd), BTech: Rad: Nuclear Medicine, NDip: Rad: Diagnostic, HDip: Ed. Technical (Rad)

Senior Lecturer:
Dr A Vahed, DTech: Quality (DUT), Reg Dental Tech

Lecturers
Ms M M P Zondi, MTech: Dent Tech (DUT), Reg Dental Tech
Mr MJ Radebe, MBA (MANCOSA)
Dr V Gareeb, BDS (MEDUNSA)
Mr T Gumbi, MHSc: Dental Tech (DUT), Reg Dental Tech
Ms N Dladla, BTech: Dental Tech (DUT), Reg Dental Tech

Technician
Mr K Padayachee, BTech: Dental Tech

Secretary Dental Sciences
Mrs R Sukhu, B Tech: Commercial Administration (ML)

Admin Assistant Dental Assisting
Ms K Pillay

Clinic Receptionist/
Dental Assistant
Mrs B Majola

Senior Technical Assistant
Ms W Allison
B Tech: Cost Management and Accounting

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:

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Qual Code</th>
<th>SAQA NLRD Number</th>
<th>Important Dates</th>
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<tbody>
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<td>ND: Dental Technology</td>
<td>NDDNT1</td>
<td>72222</td>
<td>Teach Out 2019</td>
</tr>
<tr>
<td>ND: ECP: Dental Technology</td>
<td>NDDTF1</td>
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<table>
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<th>Qualification</th>
<th>Qual Code</th>
<th>SAQA NLRD Number</th>
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<tr>
<td>HC: Dental Assisting</td>
<td>HCDNA</td>
<td>73492</td>
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</tbody>
</table>

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 behavior, appearance, personal hygiene and dress shall apply to all students registered in a Dental Technology programme. Students are not allowed to perform private work for patients or dentists, or any other dental professional. This aligns with No. 17 of Section 1.16 of SADTC ACT.

Laboratory Conduct

Only Dental Technology students are allowed in the Dental laboratories.

- Noise levels should be kept low at all times.
- Hand bags/Backpacks should be stored in the designated bag areas.
- No student may bring food into the dental laboratory. There is strictly no eating 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 at the end of the practical sessions.
• Students must adhere to all Health and Safety regulations whilst working in the laboratories.
• Students arriving late for a test will be allowed entry up to one hour after the commencement of the test. Such student will not be allowed extra time.
• No student may leave a test room 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 work benches and surroundings areas (including laboratory floors) 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 hair piece, 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, the student must timeously advise the department of the reason. Only exceptional reasons will be accepted for absence from guest lectures, industry or field trips. Poor attendance records may lead to penalties.
3.3.5. **Health and Safety**
Students must adhere to all Health and Safety 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**
The final date for late registration for the Dental Technology and Dental Assisting Programme will be fifteen (15) working days after the official commencement of lectures.

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 subject.

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

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

- **Equipment**

  **Equipment Damage:** students found to have willfully 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. The student is required to pay R200.00 holding fee. Each student is to ensure that they have their own equipment and instruments to complete the practical tasks. There will be consequences to those students who are **NOT** compliant.
• **Laboratory and/or Clinic Cleaning**

Students are required to clean laboratories and/or clinics at the end of the teaching day as well as to be present at general cleaning every Wednesday Afternoon (Dental Assisting) and every Thursday afternoon (Dental Technology). 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 for a third, or more, time 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 DUT’s disciplinary tribunal.

• **ABSENTEEISM**

Lecturers appreciate 100% attendance. Non-attendance will negatively impact on student performances in subjects.

3.4.3. **Workplace Based Learning (WPBL)**

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 and the prescribed experiential component must be passed in order to obtain sufficient credits to qualify for the qualification. Although the Institution undertakes to assist the student in obtaining suitable experiential learning placement, the onus is on the student to attempt to find an “employer”. The employer must be accredited by the Institution for the purposes of experiential learning.

An experiential learning agreement creates a separate contract between the “employer” and the student.

Students registered for **Applied Dental Technology II** are required to provide the department with proof of having completed 10 days of Workplace Based Learning at a commercial dental laboratory.

Students registered for **Applied Dental Technology III** are required to provide the department with proof of having 20 days of Workplace Based Learning at a commercial laboratory.

The necessary forms, to be completed by the student and the laboratory owner, are obtainable from the Secretary and must be returned no later than the first day of the fourth term. The department may, at its discretion, allocate teaching time for this exercise, but this will not exceed 10 teaching days for 3rd year students and 5 teaching days for 2nd year students.

**NOTE:** Third year students are required to pay an additional fee to the Institution for WPBL registration.
3.4.4. **Late submissions of practical tasks and assignments**

Practical tasks and assignments that are not handed in on 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 subject, but not including examinations for the purpose of this rule.

If a student misses a summative written, oral or practical test, for reasons of illness, a special test 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 it was impossible for the student to sit for the test. This certificate must be submitted to the subject 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.

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.
A graduate, on successful completion of the BTech Degree 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 Technologist. The said qualification shall entitle the holder thereof to practice a profession as a Dental Technologist, in the capacity of employer.
A graduate on successful completion of the Bachelor of Health Sciences in Dental Sciences, 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 Technologist.

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 National 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 National 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

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 practical assessment is conducted, in the concluding year of the programme, which, if completed successfully, enables the qualified student to register with the SADTC. Certain 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.

4.2 Learning Programme Structure

### National Diploma: Dental Technology

<table>
<thead>
<tr>
<th>Code</th>
<th>Subjects</th>
<th>Year of Study</th>
<th>CA/E</th>
<th>Credits</th>
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<tr>
<td>OANA101</td>
<td>Oral Anatomy I</td>
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<td>TMOR101</td>
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<td>DMSC221</td>
<td>Dental Materials Science II (Module 2)</td>
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<td>DTTH211</td>
<td>Dental Technology Theory II (Mod 1) (Crown/Bridge &amp; Orthodontics)</td>
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<td>DTTH221</td>
<td>Dental Technology Theory II (Mod 2) (Chrome &amp; Prosthetics)</td>
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<td>CA</td>
<td>0.170</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3 Programme Rules

4.3.1. 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:

<table>
<thead>
<tr>
<th>Subject</th>
<th>NSC Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (home) OR English (1st additional)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Sciences OR Mathematics OR Mathematics Literacy</td>
<td>3 3 6</td>
</tr>
<tr>
<td>And two 20 credit subjects (not more than one language)</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Compulsory Subjects</th>
<th>HG</th>
<th>SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics OR Physical Science</td>
<td>E</td>
<td>C</td>
</tr>
</tbody>
</table>

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.
4.3.2. **Selection Processes**

In accordance with Rule G5, acceptance into the programme is limited to 28 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.

4.3.3. **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.

4.3.3.1. A student Dental Technician shall not be permitted to continue with 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))

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

4.3.3.3. Oral Anatomy is a prerequisite for Applied Dental Technology III.

4.3.3.4. **Continuous Evaluation Subject Rules**

Please refer to 4.1 Learning Programme Structure to identify the subjects/modules, 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. Summative classwork and assessments are exempt from a re-submission.
4.3.3.5. Examination Subject Rules

Please refer to 4.1 Learning Programme Structure 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:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Assessment 2</td>
<td>40%</td>
<td>40% required</td>
</tr>
<tr>
<td>Assessment 3</td>
<td>30%</td>
<td>40% required</td>
</tr>
</tbody>
</table>

Note for each Study Unit:
- In respect to Test 1, a subminimum mark is not applicable.
- A subminimum pass mark of 40% is required for Assessment 1 and Assessment 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 Test 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 II and Applied Dental Technology III
Both subjects consist of 4 study units.
Final marks for each study unit will be determined as follows:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>30%</td>
<td>-</td>
</tr>
<tr>
<td>Assessment 2</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Class work</td>
<td>40%</td>
<td>40% required</td>
</tr>
</tbody>
</table>

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 test 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 must be 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 to 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 No student may bring any handbags or lunch boxes into a test or an examination. Students are to make their own arrangements as to what they should do with these articles.

B.7. Students enter, go to their workstations, and lay out and prepare their tools and instruments.

B.8. The following will be read out prior to the text/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.9. Time of arrival to 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 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 lunchtime, 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 individual 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 lay out 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 student 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. 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.
1.4 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.

1.5 All work must be submitted on an appropriate articulator.

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

A 40% sub-minimum is applicable to each discipline-specific section, and the overall pass mark for this test is 50%, and above.

J. Flasking and Packing of Dentures
The student will ensure that his/her flasks and clamps are clearly marked or labeled 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 the examinations at the end of the third 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.

4.3.5. Re-Registration Rules
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 re-register 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**

Money for materials purchases are to 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. Students are responsible for the purchase and cost of dental materials.

**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.

<table>
<thead>
<tr>
<th>DENTAL TECHNOLOGY : STUDENT EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECP</strong></td>
</tr>
<tr>
<td><strong>HAND TOOLS</strong></td>
</tr>
<tr>
<td>Micro Motor</td>
</tr>
<tr>
<td>Micro Torch</td>
</tr>
<tr>
<td>Ash Carver No. 5</td>
</tr>
<tr>
<td>Apex Carver Lecron Round</td>
</tr>
<tr>
<td>Scalpel Handle</td>
</tr>
<tr>
<td>Scalpel Blade</td>
</tr>
<tr>
<td>Wax Knife Large</td>
</tr>
<tr>
<td>Plaster Knife</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Plaster Spatula</td>
</tr>
<tr>
<td>Pk Thomas Carver</td>
</tr>
<tr>
<td>Wax Dropper</td>
</tr>
<tr>
<td>Porcelain Separator</td>
</tr>
<tr>
<td>Artery Forceps</td>
</tr>
<tr>
<td>Measuring Gauge</td>
</tr>
<tr>
<td>Glass Slab</td>
</tr>
<tr>
<td>Porcelain Brush</td>
</tr>
<tr>
<td>Porcelain Firing Trays</td>
</tr>
<tr>
<td><strong>BURS</strong></td>
</tr>
<tr>
<td>Cross Cut Bur - Dentures</td>
</tr>
<tr>
<td>S/Steel Rosehead Bur</td>
</tr>
<tr>
<td>Sandpaper Mandrel</td>
</tr>
<tr>
<td>Mandrel Screw Type</td>
</tr>
<tr>
<td>Plaster Bur</td>
</tr>
<tr>
<td>Pear Shape Carbide Bur</td>
</tr>
<tr>
<td>Tungsten Fissure Bur</td>
</tr>
<tr>
<td>Mandrel Screw Type Heavy Duty</td>
</tr>
<tr>
<td>Cutting Disc</td>
</tr>
<tr>
<td>Tungsten Carbide Cross Cut Parallel</td>
</tr>
<tr>
<td>Stone Grinder (Parallel)</td>
</tr>
<tr>
<td>Diamond Burs (Parallel, Pointed &amp; Tapered)</td>
</tr>
<tr>
<td><strong>POLISHING EQUIPMENT</strong></td>
</tr>
<tr>
<td>linen pumice wheel (4 x 42)</td>
</tr>
<tr>
<td>Calico Lathe Wheel</td>
</tr>
<tr>
<td>Rubber Cones For Denture Work (Pack of 6)</td>
</tr>
<tr>
<td>Rubber Cone (Lollipop)</td>
</tr>
<tr>
<td>Muslin Buff</td>
</tr>
<tr>
<td>Felt Polishing Cone</td>
</tr>
<tr>
<td>Metal Centred Pumice Brush</td>
</tr>
<tr>
<td><strong>GENERAL</strong></td>
</tr>
<tr>
<td>Rubber Mixing Bowl (Acrylic Resimix Large)</td>
</tr>
<tr>
<td>Rubber Mixing Bowl (Plaster Large Green)</td>
</tr>
<tr>
<td>Robinson Soft Brush</td>
</tr>
<tr>
<td>150mm Ruler Stainless Steel</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Spring Dividers 100mm</td>
</tr>
<tr>
<td>Paint Scrapers 100mm</td>
</tr>
<tr>
<td>Goggles Safety</td>
</tr>
<tr>
<td>Diagonal Cutters (Side Cutters)</td>
</tr>
<tr>
<td>Paint Brush 8mm</td>
</tr>
<tr>
<td>Water Paper</td>
</tr>
<tr>
<td>Protractor</td>
</tr>
<tr>
<td>hand/medium size towel</td>
</tr>
<tr>
<td>mechanical pencil (coloured lead)</td>
</tr>
<tr>
<td>Tippex</td>
</tr>
<tr>
<td>Tweezers</td>
</tr>
<tr>
<td>Ortho Pliers (Round Nose)</td>
</tr>
<tr>
<td>Ortho Pliers (Long Nose)</td>
</tr>
<tr>
<td>Wire Cutters</td>
</tr>
<tr>
<td>Snapper</td>
</tr>
<tr>
<td>Porcelain Kit</td>
</tr>
<tr>
<td>Flasks</td>
</tr>
</tbody>
</table>

4.3.9 **Vaccinations**

The Department will facilitate a mandatory Hepatitis B vaccination for first time entering students.
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, of study. An augmented, Extended Curriculum has been devised in order to enhance student development and to improve the student’s chances of successful completion.

5.2 Learning Programme Structure

<table>
<thead>
<tr>
<th>Code</th>
<th>Subjects</th>
<th>Year of Study</th>
<th>CA/E*</th>
<th>Credits</th>
<th>Pre-requisite</th>
<th>Co-Requisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMCA102</td>
<td>Communication I</td>
<td>1</td>
<td>CA</td>
<td>0.020</td>
<td>Admission requirements</td>
<td></td>
</tr>
<tr>
<td>OANA101</td>
<td>Oral Anatomy I</td>
<td>1</td>
<td>CA</td>
<td>0.040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TMOR101</td>
<td>Tooth Morphology I</td>
<td>1</td>
<td>CA</td>
<td>0.040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IADT112</td>
<td>Introduction to Applied Dental Technology (Year 1)</td>
<td>1</td>
<td>CA</td>
<td>0.300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IADT122</td>
<td>Introduction to Applied Dental Technology I</td>
<td>2</td>
<td>CA</td>
<td>0.100</td>
<td>Introduction to Applied Dental Technology (Year 1)</td>
<td></td>
</tr>
<tr>
<td>DDRC101</td>
<td>Dental Drawings and Carvings</td>
<td>1</td>
<td>CA</td>
<td>0.280</td>
<td>Admission</td>
<td></td>
</tr>
<tr>
<td>DCLT101</td>
<td>Dental Computer Literacy</td>
<td>1</td>
<td>CA</td>
<td>0.220</td>
<td>Admission Requirements</td>
<td></td>
</tr>
<tr>
<td>DMSC102</td>
<td>Dental Materials Science I</td>
<td>2</td>
<td>CA</td>
<td>0.250</td>
<td>Introduction to Applied Dental Technology (Year 1)</td>
<td></td>
</tr>
<tr>
<td>DTTH101</td>
<td>Dental Technology Theory I</td>
<td>2</td>
<td>CA</td>
<td>0.150</td>
<td>Introduction to Applied Dental Technology (Year 1), Dental Drawings and Carvings Dental Computer Literacy</td>
<td></td>
</tr>
<tr>
<td>APDT101</td>
<td>Applied Dental Technology I</td>
<td>2</td>
<td>CA</td>
<td>0.100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHCD111</td>
<td>Physics &amp; Chemistry I (Mod 1) (Physics)</td>
<td>2</td>
<td>E</td>
<td>0.050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHCD121</td>
<td>Physics &amp; Chemistry I (Mod 2) (Chemistry)</td>
<td>2</td>
<td>E</td>
<td>0.050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMSC211</td>
<td>Dental Materials Science II (Module 1)</td>
<td>3</td>
<td>E</td>
<td>0.145</td>
<td>Dental Materials Science I, Dental Technology I</td>
<td></td>
</tr>
<tr>
<td>DMSC221</td>
<td>Dental Materials Science II (Module 2)</td>
<td>3</td>
<td>E</td>
<td>0.145</td>
<td>Dental Materials Science II (Mod I)</td>
<td></td>
</tr>
<tr>
<td>DTTH211</td>
<td>Dental Technology Theory II (Mod 1) (Crown/Bridge &amp; Orthodontics)</td>
<td>3</td>
<td>CA</td>
<td>0.080</td>
<td>Dental Technology Theory I</td>
<td></td>
</tr>
<tr>
<td>DTTH221</td>
<td>Dental Technology Theory II (Mod 2) (Chrome &amp; Prosthetics)</td>
<td>3</td>
<td>CA</td>
<td>0.080</td>
<td>Dental Technology Theory I</td>
<td></td>
</tr>
<tr>
<td>APDT201</td>
<td>Applied Dental Technology II</td>
<td>3</td>
<td>CA</td>
<td>0.180</td>
<td>Tooth Morphology I Applied Dental Technology I</td>
<td></td>
</tr>
<tr>
<td>JURI111</td>
<td>Jurisprudence I (Module 1)</td>
<td>3</td>
<td>E</td>
<td>0.050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JURI121</td>
<td>Jurisprudence I (Module 2)</td>
<td>3</td>
<td>E</td>
<td>0.050</td>
<td>Jurisprudence I (mod 1)</td>
<td></td>
</tr>
<tr>
<td>BPRD101</td>
<td>Business Practice I</td>
<td>4</td>
<td>CA</td>
<td>0.100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMSC301</td>
<td>Dental Materials Science III</td>
<td>4</td>
<td>CA</td>
<td>0.250</td>
<td>Dental Materials Science II Oral Anatomy</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Course Description</td>
<td>Credits</td>
<td>CA</td>
<td>Module</td>
<td>Course Description</td>
<td>Credits</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------</td>
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<td>--------</td>
<td>--------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>DTTH311</td>
<td>Dental Technology Theory III (Mod 1) (Crown/Bridge &amp; Orthodontics)</td>
<td>4</td>
<td>CA</td>
<td>0.095</td>
<td>Dental Technology Theory II (Mod 1) (Crown/Bridge &amp; Orthodontics) Oral Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>DTTH321</td>
<td>Dental Technology Theory III (Mod 2) (Chrome &amp; Prosthetics)</td>
<td>4</td>
<td>CA</td>
<td>0.095</td>
<td>Dental Technology Theory II (Mod 2) (Chrome &amp; Prosthetics), Oral Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>APDT301</td>
<td>Applied Dental Technology III</td>
<td>4</td>
<td>CA</td>
<td>0.130</td>
<td>Oral Anatomy I Applied Dental Technology II</td>
<td>4</td>
</tr>
<tr>
<td>ETDN301</td>
<td>Experiential Learning</td>
<td>4</td>
<td>CA</td>
<td>0.000</td>
<td>Oral Anatomy I</td>
<td>4</td>
</tr>
</tbody>
</table>

*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:

<table>
<thead>
<tr>
<th>Subject</th>
<th>NSC Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (home) OR English (1st additional)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Sciences OR</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics OR</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Literacy</td>
<td>6</td>
</tr>
<tr>
<td>And two 20 credit subjects</td>
<td>3</td>
</tr>
<tr>
<td>(not more than one language)</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Compulsory Subjects</th>
<th>HG</th>
<th>SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td>E</td>
<td>C</td>
</tr>
</tbody>
</table>

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 28 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.
6. Subject Content

SUBJECT CONTENT: ND: DENTAL TECHNOLOGY & ND: DENTAL TECHNOLOGY EXTENDED PROGRAMME (ECP)
NB: Students are to read this section in conjunction with the relevant study guide.

ORAL ANATOMY (OANA101)
Assessment Plan
Assessments - 80%
Assignments - 20%

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

TOOTH MORPHOLOGY (TMOR101)
Assessment Plan
Assessments - 70%
Assignments - 30%

Topics Covered
Permanent maxillary premolars. Permanent mandibular premolars, Permanent maxillary molars.
Permanent mandibular molars. Tissues of the teeth and pulp cavities of permanent teeth.
Dental anomalies. Forensic Dentistry.

APPLIED DENTAL TECHNOLOGY I (APDT101)
Assessment Plan
Class work - 40%
Assessments - 60%

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
This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.
There is no supplementary examination/test. Your final mark will be made up of class work (40%) and formal moderated tests (60%). 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**

**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

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**APPLIED DENTAL TECHNOLOGY III (APDT301)**

**Assessment Plan**
- Class work: 40%
- Assessment: 60%

**Laboratory based Content Covered:**

**Prosthetics**

**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

DENTAL MATERIALS SCIENCE I (DMSC102)
Assessment Plan
Assessment  -  65%
Assignments  -  35%

Topics Covered

DENTAL TECHNOLOGY THEORY I (DTTH 101)
Assessment Plan
Assessment  -  70%
Assignments  -  30%

Theory Content Covered

DENTAL TECHNOLOGY THEORY II (DTTH 211/221)
Assessment Plan
Assessment  -  70%
Presentation & Assignments -  30%

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.

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

DENTAL TECHNOLOGY THEORY III (DTTH 311/321)
Assessment Plan
Assessment - 70%
Presentation & Assignments - 30%

Theory Content Covered
Crown and Bridge
Introduction to metal ceramics. Cast metal ceramic crown and bridge design (Optimizing aesthetics).

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

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

**DENTAL MATERIALS SCIENCE III (DMSC301)**

**Assessment Plan**
- Assessment 70%
- Presentation & Assignments 30%

**Topics Covered**
- 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
Specific Heat Capacity, Latent Heat, Light, Nature of Light, Reflection and Refraction, Dispersion, Colour

Assessment Plan (Chemistry)
Theory Tests  40%
Examinations  60%

Topics Covered

6.  B TECH: DENTAL TECHNOLOGY (BTDNT1)

6.1 Programme Information
The B Tech programme is a single year qualification, which enables successful students to become registered (SADTC) laboratory owners. A final practical assessment is conducted which, if completed successfully, enables the qualified student to register with the SADTC. All 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.

6.2 Learning Programme Structure

<table>
<thead>
<tr>
<th>Code</th>
<th>Subjects</th>
<th>Year of Study</th>
<th>CA/E*</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMDT101</td>
<td>Research Methods &amp; Techniques I</td>
<td>4</td>
<td>CA</td>
<td>0.200</td>
</tr>
<tr>
<td>BPRD201</td>
<td>Business Practice II</td>
<td>4</td>
<td>CA</td>
<td>0.200</td>
</tr>
<tr>
<td>DMSC411</td>
<td>Dental Materials Science IV (Module 1) (Theory)</td>
<td>4</td>
<td>CA</td>
<td>0.125</td>
</tr>
<tr>
<td>DMSC421</td>
<td>Dental Materials Science IV (Module 2) (Research Report)</td>
<td>4</td>
<td>CA</td>
<td>0.125</td>
</tr>
<tr>
<td>DTTH411</td>
<td>Dental Technology IV (Module 1) (Crown &amp; Bridge and Orthodontics)</td>
<td>4</td>
<td>CA</td>
<td>0.088</td>
</tr>
<tr>
<td>DTTH421</td>
<td>Dental Technology IV (Module 2) (Chrome and Prosthetics)</td>
<td>4</td>
<td>CA</td>
<td>0.088</td>
</tr>
<tr>
<td>DTTH431</td>
<td>Dental Technology IV (Module 3) (Practical)</td>
<td>4</td>
<td>CA</td>
<td>0.175</td>
</tr>
</tbody>
</table>

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

6.3 Programme Rules
6.3.1 Entrance Requirements:
National Diploma: Dental Technology or an equivalent qualification

6.3.2 Selection Criteria
Entry into the B Tech is not automatic. A total of 15 places are available to students and selection will be on the basis of academic performance as
determined by a ranking system. Working experience will be an added advantage for those students not applying directly from the National Diploma. Students are required to formally apply in the third term of their third year of study should they wish to be considered for the B Tech. Applicants from industry must apply by the 20 September 2019.

Application forms are available from the Faculty Office: Health Sciences. Completed application forms must be submitted to the Departmental secretary of Dental Sciences.
1. **Ranking Criteria:**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A <strong>minimum</strong> final mark of 55% in Applied Dental Technology III</td>
<td>55</td>
</tr>
<tr>
<td>2. A <strong>minimum</strong> final mark of 55% in Dental Materials Science III</td>
<td>55</td>
</tr>
<tr>
<td>3. A <strong>minimum</strong> final mark of 55% in Dental Technology Theory III</td>
<td>55</td>
</tr>
<tr>
<td>4. Any higher mark in points 1, 2, and 3 above will be awarded the equivalent number of points; e.g. 65% = 65 points</td>
<td></td>
</tr>
<tr>
<td>5. Completion of the ND: Dental Technology (Mainstream) in minimum time (3 years) without repeating any subjects</td>
<td>10</td>
</tr>
<tr>
<td>6. Completion of the ND: Dental Technology (ECP) in minimum time (4 years) without repeating any subjects</td>
<td>10</td>
</tr>
<tr>
<td>7. Students completing both 5, and 6 above in more than the minimum time.</td>
<td>5</td>
</tr>
<tr>
<td>8. 1 point will be awarded for each year of industry work experience (evidence must be provided); e.g. 2 years of work experience = 2 points</td>
<td></td>
</tr>
</tbody>
</table>

Applicants are required to formally apply should they wish to be considered for the B. Tech programme. Application forms are available from the Faculty Office of Health Sciences. Completed forms must be submitted to the Secretary of the Dental Sciences and/or department before the due date.

Selection will be based on merit as determined by the criteria and points allocation in the table below. Note that preference will be given to those individuals who have industry experience in all four disciplines of Dental Technology. Interviews may be conducted to assess the suitability of the applicant for the programme.

Written evidence of industry experience in a registered Dental Technology Laboratory must be provided with the application or an accumulation of work experience collated as a portfolio.

### 6.3.3 Pass Requirements

#### 6.3.3.1 A student Dental Technologist must complete the BTech: Dental Technology within two (2) years. This is a South African Dental Technicians Council rule, as well as that of the Durban University of Technology.
6.3.3.2 Subject Rules

**Dental Materials Science IV**

The subject consists of two modules:

- Module 1: Theory

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Assessment 2</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Assignment</td>
<td>25%</td>
<td>40%</td>
</tr>
</tbody>
</table>

- Module 2: Research Project

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Abstract</td>
<td>10%</td>
<td>40%</td>
</tr>
<tr>
<td>Research Poster</td>
<td>20%</td>
<td>45%</td>
</tr>
<tr>
<td>Journal paper</td>
<td>70%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Each module will contribute fifty percent (50%) towards the final mark. Both modules must be passed in the same academic year. With reference to Module 2, a student not obtaining the required standard at submission date will be allowed to re-submit before January of the following year, but will fail the current year.

**Dental Technology Theory IV**

The subject consists of two modules each containing two study units:

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

Both modules run for the entire year (annual)

Both modules must be passed in the same academic year.

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

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Assessment 2</td>
<td>40%</td>
<td>40% required</td>
</tr>
<tr>
<td>Assignment/Presentation</td>
<td>30%</td>
<td>40% required</td>
</tr>
</tbody>
</table>

**Note for each Study Unit:**

- A subminimum pass mark of forty percent (40%) is required for Assessment 1 and Assessment 2.
- A subminimum of fifty percent (50%) will apply to assignments / presentations.

**NOTE:** In addition to the above, the rule pertaining to the 
ND: Dental Technology - 4.3.3.7 applies.
Dental Technology IV (Module 3) (Practical) is divided into four (4) study units, namely: Crown & Bridge; Orthodontics; Cobalt Chrome; and Prosthetics.

Dental Technology IV (Practical)
Subjects consist of 4 study units.

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

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>Assessment 2</td>
<td>30%</td>
<td>40% required</td>
</tr>
<tr>
<td>Class work</td>
<td>40%</td>
<td>40% required</td>
</tr>
</tbody>
</table>

Business Practice II
The course will be evaluated by continuous evaluation. No formal examinations will be written. Students will be evaluated by submitting a formal business plan as well as a group assignment and an accounting equation written test.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mall exhibition</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Business Report</td>
<td>80%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Research Methods & Techniques I (RMDT101)
This continuous assessment subject has no formal examinations.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>Sub minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept paper</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Research proposal</td>
<td>70%</td>
<td>50%</td>
</tr>
</tbody>
</table>

NOTE: Research Methods & Techniques I is a co-requisite for Dental Materials IV (Module II) (Research Project).

In addition to the above, the rule pertaining to the ND: Dental Technology - 4.3.3.7 applies.
6.4 Subject Content: B Tech: Dental Technology
NB: Students are to read this section in conjunction with the relevant study guide

BUSINESS PRACTICE II (BPRD201)
Assessment Plan
Mall Exhibition 20%
Business Report 80%

Topics Covered
Applicable software packages. Design a dental laboratory. Develop and use interactive skills. Employer/employee relationship. Establish goals (Self and organization). Problem solving and decision making.

DENTAL MATERIALS SCIENCE IV THEORY (DMSC411)
This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.
Please refer to your discipline specific student guide for further details.

Assessment Plan
Assessments 75%
Assignment 25%

Content Covered
Biological response to dental materials; Occupational Health and Safety of Dental Materials; Dental Implant Materials; and Maxillofacial Dental Materials.

DENTAL MATERIALS SCIENCE IV (DMSC421- Module II) RESEARCH REPORT
(See subject guide for specific details)
Assessment Plan
Research abstract 10%
Poster 20%
Research Report/Journal/Case Study 70%

Content Covered:
Writing of a Research Report/ Journal Article/Case Study by providing the: Background/Rationale/ Introduction; Literature Review; Research Design and Methodology; Results/Findings and Discussions; Conclusions and Recommendations; Referencing through EndNote and using Turnitin; Writing a research abstract for a research poster; and presenting research results to peers and to the wider DUT community.
DENTAL TECHNOLOGY IV (DTTH 411) Crown & Bridge & Orthodontics

Assessment Plan
Assessments 70%
Assignments 30%

Topics Covered
Crown and Bridge
All-ceramic systems; Metal-ceramic systems; Planning and design factors for large cases. Occlusion factors in ceramic restorations; The use of precision attachments and broken stress connectors in large cases; Combination cases with removable partial dentures and fixed restorations with milling and attachments; Implant borne metal-ceramic restorations; Design factors for practical cases.

Orthodontics
Principles of angle Class I treatment; Principles of angle Class II treatment; Principles of angle Class III treatment; Functional jaw orthopedics; Case discussions; Practical cases.

DENTAL TECHNOLOGY IV (DTTH421) Chrome & Prosthetics

Assessment Plan
Assessments 70%
Assignments 30%

Chrome
Removable partial dentures (Cobalt Chrome); Design principles of chrome cobalt partial dentures; Practical cases; Combination work/precision attachments, backings and onlays.

Prosthetics
Introduction to implantology; Implant terminology; Types of implants; Prosthetic procedures; Occlusal considerations; Biomechanical considerations; Practical cases; Combination work and attachments.

DENTAL TECHNOLOGY IV (DTTH431) (Practical)

Assessment Plan
Class work 40%
Assessment 60%

Topics Covered
Prosthetics
Overdentures with attachments, Implant terminology, Types of implants, Prosthetic procedures, Occlusal considerations.
Biomechanical considerations, Practical cases, Combination work.

Cobalt Chrome
Removable partial dentures, Design of chrome cobalt partial dentures, Practical cases, Combination work, backings, onlays, laser welding.

Orthodontics
Functional jaw orthopaedics, Case discussions, Practical cases.

Crown and Bridge;
Metal-ceramic systems; Planning and design factors for large cases, Occlusion factors in ceramic restorations; The use of precision attachments and broken stress connectors in large cases; Combination cases with removable partial dentures and fixed restorations, including milling and precision attachments; CAD-CAM. Practical cases.
RESEARCH METHODS AND TECHNIQUES (RMTQ101)
Assessment Plan (See subject guide for specific details)
Concept paper 30%
Research Proposal 70%
Note that the final pass mark for this module is 50%.

Content Covered
Overview of Quantitative Research and Qualitative Research, design and methodology.
Research Proposal Process: Aim and Objectives/Research Questions; Context of the study;
Problem Statement; Delimitations, Limitations, Assumptions and Hypothesis; Overview on
Literature Review; Research Design and Methodology (What stimulated the study, Sampling,
Data collection and Data Analysis); References and Plagiarism; Ethical Considerations; and
Endnote; Academic Development/Writing: Research Proposal.
7. **BACHELOR OF HEALTH SCIENCES: DENTAL TECHNOLOGY (BHDNT1)**

7.1 **Programme Information**
A Bachelor of Health Sciences Degree in Dental Technology which enables successful students to become registered (SADTC) laboratory owners with the South African Dental Technicians Council (SADTC). A final practical assessment is conducted, in the concluding year of the programme, which, if completed successfully, enables the qualified student to register with the SADTC. All subjects do not have a final examination. 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.

7.2 **Programme Rules**

7.2.1. **Minimum Admission Requirements**
In addition to Rule G7 the minimum entrance requirement is a National Senior Certificate (NSC) or a Senior Certificate (SC) or a National Certificate (Vocational) NC (V) that is valid for entry into a Bachelor’s Degree and must include the following subjects at the stated minimum weightings below.

<table>
<thead>
<tr>
<th>Subject</th>
<th>NSC Rating</th>
<th>Senior Certificate</th>
<th>NC(V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (home) OR English (1st additional)</td>
<td>4</td>
<td>D</td>
<td>B</td>
</tr>
<tr>
<td>Physical Sciences AND</td>
<td>4</td>
<td>D</td>
<td>B</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>D</td>
<td>B</td>
</tr>
<tr>
<td>And two 20 credit subjects (not more than one language)</td>
<td>4</td>
<td></td>
<td>70%</td>
</tr>
</tbody>
</table>

**Minimum Admission Requirements in respect of Work Experience, Age, Maturity, RPL and International Students.**

The DUT general rule G7 (3) and G7(8) respectively will apply.

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

7.2.2. **Selection Criteria**
All applicants must apply through the Central Applications Office (CAO). In accordance with Rule G5, acceptance into the programme is limited. Since more qualifying applications are received than can be accommodated, the following selection process will apply:
• 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.
• Applicants who meet the minimum departmental requirements will be ranked and may be invited to a placement tests.
• Initial shortlisting for selection is based on the applicant’s academic performance in Grade 12 and or Grade 11 results.

Note: Applicants whose application has been declined due to poor academic achievement in grade 11 may reapply to the programme should they be able to show improved academic performance in the final grade 12 examinations. Those applicants who wish to reapply should immediately notify the programme of the intention to reapply. In order for the application to be reconsidered, the applicant must submit the final grade 12 results to the Department as soon as these results are available.

• Applicants who pass the placement tests are invited for an interview.

Note: Applicants scoring more than 23 points in their matriculation examination stand a better chance of being selected.

The point scores for each National Senior Certificate (NSC) subject or the Senior Certificate (SC) results is obtained by using the table below:

<table>
<thead>
<tr>
<th>POINT SCORES</th>
<th>NSC</th>
<th>Senior Certificate</th>
<th>NC(V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>HG</td>
<td>SG</td>
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<tr>
<td>90 – 99%</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>80 – 89%</td>
<td>7</td>
<td>7</td>
<td>5</td>
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<tr>
<td>70 – 79%</td>
<td>6</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>60 – 69%</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>50 – 59%</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>40 – 49%</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>30 – 39%</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 29%</td>
<td>1</td>
<td></td>
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</table>

Note: no points are allocated for ten (10) credit subjects.

Final selection is based on criteria and weightings in the table below.
WEIGHTINGS OF ASSESSMENTS

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matriculation Score</td>
<td>50%</td>
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<tr>
<td>Placement Test</td>
<td>40%</td>
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<tr>
<td>Interview</td>
<td>10%</td>
</tr>
</tbody>
</table>

- Finally, selected applicants are required to visit a dental laboratory. Failure to provide proof of dental laboratory visitation by the due date as determined by the Department will render the application unsuccessful.
- Selected applicants will be placed into either the four-year Degree or the five-year Extended Curriculum Programme.
- 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 automatically withdrawn.

7.2.3. Progression rules
In addition to Rules G14 and G16 the following is applicable:

1. As per table 3, students must pass all prerequisite modules before registration for the higher-level modules.

All students must comply with the departmental rules and procedures for practical tests and/or examinations as stated in the relevant departmental manual/study guide. Breach of these procedures may result in disciplinary action being taken.

Prior to the commencement of practical test and examinations, students will be made aware of the detailed rules and all students will be required to sign acknowledgement thereof.

7.2.4. First Aid Certificate
Students shall not be permitted to graduate unless they are in possession of a certificate in General First-Aid issued by a first-aid organization recognized by the S.A. Dental Technicians Council.

7.2.5. Re-Registration Rules

7.2.6. Exclusion Rules
Please refer to DUT Rule G17, a student who fails three or more modules with less than 40% in each of the failed modules is not permitted to reregister for the programme. De-registration from any module is subject to the provisions of rule G6(2).
7.2.7 **Duration of Study**
In accordance with the DUT Rule G23B (2) and Rule G23B (3), the minimum duration is four years, including any periods of dental laboratory practice and the maximum duration will be six years of registered study, including any periods of dental laboratory practice.

7.2.8 ** Interruption of Studies**
Should a student interrupt their studies for a period of more than three consecutive years, the student will need to apply to the department for permission to reregister and will need to prove relevance of appropriate knowledge prior to being given permission to continue with registration.

7.2.9 **SADTC Registration**
Students are required to register with the SADTC by the 31st March in the first year of study.

Dental Laboratory Practice
Students are referred to Rule G28.

1. **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.

2. 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.

3. Students are required to comply with the rules and regulations of the laboratory in which they are placed.

4. 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.

7.2.10 **Materials Purchases**
Certain students are supplied materials for practical training.

Students are required to purchase additional materials for repeat practical exercises. Money for materials purchases are to be deposited with the official Durban University of Technology cashiers into account number FDTS 301374. A duplicate receipt is to be requested from the cashier which then needs to be presented to the departmental secretary who will process the payment on the internal departmental system.
7.2.11. Rules for Practical Tests and Examinations

A. Preparation procedures prior to the commencement of the test 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 must be laid out or on-hand and clearly marked for the test / examination.

B. Test and/or examination day.

B.1. No students may bring any hand-bags or lunch boxes into a test or an examination. Students are to make their own arrangements as to what they should do with these articles.

B.2. Students enter, go to their work stations, and lay out and prepare their tools and instruments.

B.3. The following will be read out prior to the text/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.4. Time of arrival to 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.

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 individual 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 work stations and lay out their work-in-progress on their work benches.
D.3. All students will then clean the laboratory to the satisfaction of the invigilator.
D.4. After the laboratory has been cleaned, the student will stand by their work stations 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 work station;
E.5. Invest or cast another student’s work, either together or separately with their own work.

F. 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.

J. **Flasking and Packing of Dentures**
The student will ensure that his/her flasks and clamps are clearly marked or labeled 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.

### 7.3 Learning Programme Structure
**Bachelor of Health Sciences:**

<table>
<thead>
<tr>
<th>STUDY PERIOD</th>
<th>MODULE TITLE</th>
<th>MODULE CODE</th>
<th>HEQSF LEVEL</th>
<th>SAQA CREDITS</th>
<th>C/E</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>PRINCIPLES AND PRACTICES OF DENTAL TECHNOLOGY I (MOD I)</td>
<td>PPDT111</td>
<td>5</td>
<td>12</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SP1</td>
<td>DENTAL MATERIALS SCIENCE I (MOD I)</td>
<td>DMTS111</td>
<td>5</td>
<td>12</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SP1</td>
<td>INTRODUCTION TO ORAL ANATOMY (MOD I)</td>
<td>INOA111</td>
<td>6</td>
<td>8</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>SP1</td>
<td>INTRODUCTION TO TOOTH MORPHOLOGY (MOD I)</td>
<td>ITOM111</td>
<td>6</td>
<td>8</td>
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<td>Code</td>
<td>Credits</td>
<td>Time</td>
<td>Type</td>
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<tr>
<td>SP1</td>
<td>COMMUNITY HEALTH CARE AND RESEARCH I</td>
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<td>12</td>
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<td>PERSONAL AND PROFESIONAL DEVELOPMENT I</td>
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<td><strong>FIRST YEAR: SECOND SEMESTER</strong></td>
<td></td>
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<td>SP2</td>
<td>PRINCIPLES AND PRACTICES OF DENTAL TECHNOLOGY I (MOD II)</td>
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<td>INTRODUCTION TO TOOTH MORPHOLOGY (MOD II)</td>
<td>ITOM121</td>
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<td>INTRODUCTION TO ORAL ANATOMY (MOD II)</td>
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<td>DENTAL MATERIALS SCIENCE I (MOD II)</td>
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<tr>
<td>SP2</td>
<td>CORNERSTONE 101</td>
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<tr>
<td>SP2</td>
<td>PHYSICS</td>
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<td>SP3</td>
<td>PRINCIPLES AND PRACTICES OF ORTHODONTICS II (MOD I)</td>
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<td>PRINCIPLES AND PRACTICES OF CROWN &amp; BRIDGE II (MOD I)</td>
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<td>PRINCIPLES AND PRACTICES OF PROSTHETICS II (MOD I)</td>
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<td>SP3</td>
<td>ADVANCE KNOWLEDGE OF DENTAL ANATOMY AND MORPHOLOGY</td>
<td>AKDM101</td>
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<td>DENTAL LAW &amp; ETHICS (MOD I)</td>
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<td>SP3</td>
<td>WORLD OF WORK VALUES IN THE WORK PLACE</td>
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<td>LAW OF LIFE</td>
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<td>COMMUNITY ENGAGEMENT</td>
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### THIRD YEAR: FIRST SEMESTER

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<td></td>
<td>Health Business Studies I</td>
<td>HBST101</td>
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<td></td>
<td>An Introduction to the Principles and Practices of Research (Mod I)</td>
<td>IPPR111</td>
<td>7</td>
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### THIRD YEAR: SECOND SEMESTER

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<tbody>
<tr>
<td>SP6</td>
<td>Principles and Practices of Advanced Removable Prosthodontics I (Mod II)</td>
<td>PARP121</td>
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<td>Principles and Practices of Crown &amp; Bridge III (Mod II)</td>
<td>PPCB321</td>
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<td>An Introduction to the Principles and Practices of Research (Mod II)</td>
<td>IPPR121</td>
<td>7</td>
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<td>IPPR111</td>
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<td>Community Health Care and Research III</td>
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### FOURTH YEAR: FIRST SEMESTER

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<td>SP7</td>
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<td>Principles and Practices of Prosthetics IV (Mod I)</td>
<td>PPRO411</td>
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<td>PPRO301</td>
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</table>
INTRODUCTION TO ORAL ANATOMY: MODULES I & II (INO4111 & INOA121)
This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year end

Assessment Plan per Module:
Theory Tests - 60%
Theory Assignment - 40%

Note for Each Module:
1. Module 1 is a prerequisite to Module 2.
2. Both modules need to be passed in one year as they are pre-requisite modules to the subject ‘Advance Knowledge of Dental Anatomy and Morphology’.
3. Please refer to your discipline specific student guide for further details.
Subject Content Covered

Module 1: Surface Anatomy of the skull and associated anatomical structures; The Oral Mucous Membrane; The human skull, including the Maxillae, Mandible and their relationship to the teeth; and The Temporomandibular joint.

Module 2: Salivary glands; Infection control procedure and diseases of the Oral Cavity; Trigeminal Nerve; Blood supply to the oral cavity; and lymphatic drainage of the head and neck.

INTRODUCTION TO TOOTH MORPHOLOGY: MODULES I & II (ITMO111 & ITMO121)
This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.

Assessment Plan per Module
Tests - 60%
Assignments - 40%

Note for Each Module:
1. Module 1 is a prerequisite to Module 2.
2. Both modules need to be passed in one year as they are pre-requisite modules to the subject ‘Advance Knowledge of Dental Anatomy and Morphology’.
3. Please refer to your discipline specific student guide for further details.

Subject Content Covered

Module 2: Permanent maxillary molars; Permanent mandibular molars; Principles of Mastication; Occlusion and malocclusion; The primary dentition; and dental anomalies.

ADVANCED KNOWLEDGE OF DENTAL ANATOMY AND MORPHOLOGY (AKDM101)
This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.
Please refer to your discipline specific student guide for further details.

Assessment Plan
Tests = 60%
Theory Assignments = 40%

Subject Content Covered
Border Movements; Structural and functional features of the muscles of mastication and facial expression; Dental Histology; Tissues of the teeth and pulp cavities of the permanent dentition; Oral Anatomy related to oral function; Forensic Dentistry.
This subject consists of a theory and practical component. Please note that there are two modules in this subject. Module 1 is a prerequisite to Module 2.

Both modules need to be passed in one year as they are pre-requisite modules to the subject ‘Principle and practices of Dental Technology II’.

This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.

### Assessment Plan per module

<table>
<thead>
<tr>
<th>Assessment Section</th>
<th>% Weight Contribution to the Final Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theory Component:</strong></td>
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<td>Assessment = 60%</td>
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<td><strong>Practical Component:</strong></td>
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<tr>
<td>Assessment = 40%</td>
<td>50%</td>
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<tr>
<td>Classwork = 60%</td>
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</tbody>
</table>

### Topics Covered

#### Theory


#### Practical

PRINCIPLES AND PRACTICES OF PROSTHETICS II MODULES I & II (PPRO211 & PPRO221)

ASSESSMENT PLAN
This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.
There are two assessment sections, namely a theoretical component and a practical component.
Each assessment component has a specific and equal weighting towards the final mark, namely:

1. Theory Component:
   Tests = 60%
   Theory Assignment = 40%

2. Practical Component:
   Tests = 40%
   Class Practical’s = 60%

Note:
1. The sub-minimum mark for each component is 50%.
2. This subject is a pre-requisite to ‘Principles and Practices of Prosthetics III.
3. Please refer to your discipline specific student guide for further details.

Subject Content Covered
Theoretical Principles of Removable Acrylic Dental Prosthetics: Prosthodontic Terminologies; Artificial Tooth Selection; Aesthetic Denture Set-ups; General Principles of Balance; Lingualised & Monoplane Occlusion; Clear Palates; Palatal Strengtheners; Gold Denture Inlays; and Hard and Soft Denture Relines.
Removable Acrylic Dental Prosthetics laboratory practice: Techniques used in the fabrication of “aesthetically” functional wax “try-in” and “finish” dentures; Clear palate dentures; Design and construction of gold inlays in dentures; Denture relines; and Introduction to acrylic partial dentures.

PRINCIPLES AND PRACTICES OF CROWN AND BRIDGE II MODULES I & II (PPCB211 & PPCB221)

Subject Content
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

PRINCIPLES AND PRACTICES OF ORTHODONTICS II MODULES I & II (PPOR211 & PPOR221)

ASSESSMENT PLAN
This module will employ continuous assessment through tests, assignments or presentations and formative assessment activities of which theory will constitute 40% of the final mark and practical work will constitute 60%.
Moderation: 60% of theory and practical formal assessments will be moderated internally. Each student must obtain an overall final mark of 50% in order to pass this module.

Topics Covered
Theory
History and development of orthodontics; what is Orthodontics; Indications of orthodontic treatment; Terminology relating to the structures in the oral and the relationships of the jaws; Timing of orthodontic treatment; Tooth movements by orthodontic appliances; Biomechanics of tooth movements; removable appliances

Practical
Adams clasps; ball clasps; C Clasps; Finger spring; Z spring; T spring; Lapp Spring; Roberts retractor; canine retractor.

PRINCIPLES AND PRACTICES OF PROSTHETICS III (PPRO301)
ASSESSMENT PLAN

<table>
<thead>
<tr>
<th>Assessment Section</th>
<th>% Weight Contribution to the Final Mark</th>
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</thead>
<tbody>
<tr>
<td>Theory Component:</td>
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<td>▪ Assessment = 60%</td>
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<td>▪ Assignment = 40%</td>
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<td>Practical Component:</td>
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<td>▪ Assessment = 40%</td>
<td>50%</td>
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<tr>
<td>▪ Classwork = 60%</td>
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</table>

Topics Covered
Partial Dentures, Immediate Dentures, Class II & Class III, Articulators, Duplicate Dentures, Splints, Stents and Surgical Templates, Aesthetic Dentures, Over-dentures

DENTAL MATERIALS SCIENCE I MODULES I & II (DMTS111 & DMTS121)
Please note that there are two modules in this subject. Module 1 is a prerequisite to Module 2. Both modules need to be passed in one year, as they are pre-requisite modules to the subject ‘Dental Materials Science II’.

This subject is run as a continuous assessment and therefore:-
The pass mark for this subject is 50%.
There will be no formal examination at year-end.

Assessment Plan per module
Assessment = 60%
Assignments = 40%

Topics Covered

**PRINCIPLE AND PRACTICES OF CROWN AND BRIDGE III MODULES I & II (PPCB311 & PPCB321)**

**Subject Content**


**PRINCIPLES AND PRACTICES OF ORTHODONTICS III (PPOR301)**

**ASSESSMENT PLAN**

This module will employ continuous assessment through tests, presentations and formative assessment activities of which theory will constitute 40% of the final mark and practical work will constitute 60%.

Assessment tasks will follow examination rules as stipulated in the Institution’s general rule book, departmental handbook and module study guide for students. Students’ performance will be tracked and monitored through submission of draft work and consultations with the academic development practitioners.

**Moderation:** 60% of theory and practical formal assessments will be moderated externally. The final practical assessment will be externally examined by an examiner appointed by the South African Dental Technicians Council

**TOPICS COVERED**

Skeletal and dentoalveolar malocclusions; Temporomandibular joint disorders; Inclined planes; Diagnostic setups; Removable dentofacial orthopaedic appliances; Head gear; Twin block; Herbst appliance; coffin spring; Piston screw; Hyrax; Lip bumper; Quad Helix; Anterior & Posterior bite planes; Midline, sectional and sagittal expansion screws; Buccal Bow; J hooks; tubing; laser welding; space maintainers; gum guards; habit breakers; Night guards; clenching inhibitors; snoring devices; fixed retainers; clear retainers.
PRINCIPLES AND PRACTICES OF ADVANCED REMOVABLE PROSTHODONTICS I MODULES I & II (PARP111 & PARP121) ASSESSMENT PLAN

<table>
<thead>
<tr>
<th>Assessment Section</th>
<th>% Weight Contribution to the Final Mark</th>
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<tbody>
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<tr>
<td>Classwork = 60%</td>
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</table>

Topics Covered


DENTAL LABORATORY PRACTICE (DLPR101)

HEALTH BUSINESS STUDIES I (HBST101)
Assessment Plan
Theory Tests 40%
Examinations 60%

Topics Covered

HEALTH BUSINESS STUDIES II (HBST201)

DENTAL MATERIALS SCIENCE II MODULES I & II (DMTS211 & DMTS221) ASSESSMENT PLAN

<table>
<thead>
<tr>
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<th>% Weight</th>
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<tr>
<td>Tests</td>
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<tr>
<td>Total</td>
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A pass mark of 50% is required on all written assessments.
Objectives of assessments include testing:

- Ability to transfer knowledge learnt in dental materials class to correctly select optimum dental materials.
- Ability to critically analyse dental materials according to their properties and behaviours.
- Ability to independently apply knowledge.
- Confidence in correctly evaluating certain dental materials.

Moderation will take place according to the University’s assessment policy.

**Topics Covered**

Stress/strain, Elastomeric impression materials, Die materials, Inlay waxes, Investments, Metals and alloys, Soldering, Reline materials, Wrought base metal alloys

**DENTAL MATERIALS SCIENCE III MODULES I & II (DMTS311 & DMTS321)**

**Assessment Plan**

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<td>Presentation &amp; Assignments</td>
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**Topics Covered**

Maxillo facial materials, Platinum foil & refractory die materials for ceramic restorations

**DENTAL LAW AND ETHICS MODULES I & II (DLET111 & DLET121)**

**Assessment Plan**

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<td>Theory Tests</td>
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<tr>
<td>Assignments</td>
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</table>

**Topics Covered**

Objectives, functions and powers of the SADTC, Education, training and registration of Dental Technicians, 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, Loyalty to the organization and profession, Professional Image. Other Laws and Acts pertaining to employed Dental Technicians

**PHYSICS (PSCS101)**

**Assessment Plan (Physics)**

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<td>Examinations</td>
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**Topics Covered**

**CHEMISTRY (CHMS101)**

**Assessment Plan**
- Theory Tests: 40%
- Examinations: 60%

**Topics Covered**

**AN INTRODUCTION TO THE PRINCIPLES AND PRACTICES OF RESEARCH MODULES I & II (IPPR111 & IPPR121)**

Note that:
- This is a prerequisite subject to Fundamental Principles and Practices of Research Design and Methodology.
- The final pass mark for this module is 50%.

**Assessment Plan (See subject guide for specific details)**
- Research Phase I: 30%
- Research Proposal: 70%

**Topics Covered**
- Overview of Quantitative Research and Qualitative Research, design and methodology.
- Research Proposal Process: Aim and Objectives/Research Questions; Context of the study; Problem Statement; Delimitations, Limitations, Assumptions and Hypothesis; Overview on Literature Review; Research Design and Methodology (What stimulated the study, Sampling, Data collection and Data Analysis); References and Plagiarism; Ethical Considerations; and Endnote.

**FUNDAMENTAL PRINCIPLES AND PRACTICES OF RESEARCH DESIGN AND METHODOLOGY MODULES I & II (FRDM111 & FRDM121)**

**Assessment Plan (See subject guide for specific details)**
- Research abstract: 10%
- Research Poster: 20%
- Research Report/Case Study/Journal Article: 70%

Note that the final pass mark for this module is 50%.

**Topics Covered:**
- Writing of a Research Report/ Journal Article/Case Study by providing the: Background/Rationale/ Introduction; Literature Review; Research Design and Methodology; Results/Findings and Discussions; Conclusions and Recommendations; Referencing through EndNote and using Turnitin; Writing a research abstract for a research poster; and presenting research results to peers and to the wider DUT community.

**DENTAL MATERIALS SCIENCE IV (DMTS401)**

This subject is run as a continuous assessment and therefore:
- The pass mark for this subject is 50%.
There will be no formal examination at year-end. Please refer to your discipline specific student guide for further details.

**Assessment Plan**

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<tr>
<td>Classwork = 60%</td>
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**Topics Covered**

Biological response to dental materials; Occupational Health and Safety of Dental Materials; Dental Implant Materials; and Maxillofacial Dental Materials.

**PRINCIPLES AND PRACTICES OF CROWN AND BRIDGE IV MODULES I & II (PPCB411 & PPCB 421)**

**ASSESSMENT PLAN**

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<tr>
<td>Classwork = 60%</td>
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**TOPICS COVERED**

All-ceramic systems; Metal-ceramic systems; Planning and design factors for large cases. Occlusion factors in ceramic restorations; The use of precision attachments and broken stress connectors in large cases; Combination cases with removable partial dentures and fixed restorations with milling and attachments; Implant borne metal-ceramic restorations; Design factors for practical cases. CAD-CAM including milling and precision attachment.

**PRINCIPLES AND PRACTICES OF ADVANCED REMOVABLE PROSTHODONTICS II MODULES I & II (PARP211 & PARP221)**

**ASSESSMENT PLAN**

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<td>50%</td>
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<tr>
<td>Classwork = 60%</td>
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</tbody>
</table>
TOPICS COVERED
Removable partial dentures (Cobalt Chrome); Miscasts. Casting defects. Indirect Retention. The RPI Bar concept. Design of chrome cobalt partial dentures; Practical cases; Combination work/precision attachments.

PRINCIPLES AND PRACTICES OF PROSTHETICS IV

<table>
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<th>Weighting</th>
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<tr>
<td>Assignment/Presentation</td>
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<td>50% required</td>
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<table>
<thead>
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<tr>
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<tr>
<td>Practical Component:</td>
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<tr>
<td>▪ Assessment = 40%</td>
<td></td>
</tr>
<tr>
<td>▪ Classwork = 60%</td>
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</table>

Content
1. Precision Attachments and Combination work, Constructing Prosthesis on Implants, Obturators and Maxillofacial Prosthesis.
8. MASTER’S OF HEALTH SCIENCES TECHNOLOGY: DENTAL TECHNOLOGY (MHDNT1)

8.1 Programme Information
This full research qualification is aligned to Rule G24 in the General Student Handbook. This 180 credits qualification is offered at SAQA Level 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) year of study and the maximum duration is three (3) years of study.

8.2 Programme Rules
8.2.1 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 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 Qualification Authority (SAQA).

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

8.2.2 Pass Requirements
Please refer to Rule G24.

8.2.3 Re-registration Rules
Rule G24 (2), Rule G26 (5) and the General Student Handbook.

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

8.2.5 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.
9. DOCTOR OF DENTAL TECHNOLOGY (DDentalTech)

9.1. Programme Information
This research intensive qualification is aligned to Rule G25 in the General Student Handbook. This 360 credits qualification is offered as SAQA Level NQF level 10. The degree of Doctor of Science 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.

9.2. Programme Rules
9.2.1 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.

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

9.2.3 Re-registration Rules
Please refer to Rule G26 (5) and the Postgraduate Student Handbook.

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

9.2.5 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

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

10.1. 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.

10.2. Learning Programme Structure

<table>
<thead>
<tr>
<th>Code</th>
<th>Subjects</th>
<th>Year of Study</th>
<th>Credits Nated</th>
<th>CA/E*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTN101</td>
<td>Cornerstone</td>
<td>I</td>
<td>.094</td>
<td>E</td>
</tr>
<tr>
<td>DAPA101</td>
<td>Dental Assisting Practical IA</td>
<td>I</td>
<td>.093</td>
<td>CA</td>
</tr>
<tr>
<td>DATA101</td>
<td>Dental Assisting Theory IA</td>
<td>I</td>
<td>.126</td>
<td>CA/ E</td>
</tr>
<tr>
<td>DNPM101</td>
<td>Dental Practice Management</td>
<td>I</td>
<td>.094</td>
<td>E</td>
</tr>
<tr>
<td>OAPA101</td>
<td>Oral Anatomy and Pathology IA</td>
<td>I</td>
<td>.093</td>
<td>CA/ E</td>
</tr>
<tr>
<td>DACP101</td>
<td>Dental Assisting Clinical Practice</td>
<td>I</td>
<td>0125</td>
<td>CA</td>
</tr>
<tr>
<td>DAPB101</td>
<td>Dental Assisting Practical IB</td>
<td>I</td>
<td>.093</td>
<td>CA</td>
</tr>
<tr>
<td>DATB101</td>
<td>Dental Assisting Theory IB</td>
<td>I</td>
<td>.126</td>
<td>CA/ E</td>
</tr>
<tr>
<td>OAPB101</td>
<td>Oral Anatomy and Pathology IB</td>
<td>I</td>
<td>.093</td>
<td>CA/ E</td>
</tr>
<tr>
<td>PHDA101</td>
<td>Pharmacology for Dental Assisting</td>
<td>I</td>
<td>.063</td>
<td>CA/ E</td>
</tr>
</tbody>
</table>

* CA — Continuous assessment / E — Examination

10.3. Programme Rules
10.3.1. 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:

<table>
<thead>
<tr>
<th>Subject</th>
<th>NSC Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (home) OR English (1st additional)</td>
<td>3</td>
</tr>
<tr>
<td>Life Sciences OR Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics OR</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Literacy</td>
<td>5</td>
</tr>
<tr>
<td>and two 20 credit subjects, of which not more than one may be a language</td>
<td>3</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Compulsory Subjects</th>
<th>HG</th>
<th>SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>Mathematics</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>Biology OR Physical Science</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>and two 20 credit subjects, of which not more than one may be a language</td>
<td>E</td>
<td>C</td>
</tr>
</tbody>
</table>

10.3.2. 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:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of the NSC, SC or NC(V) certificate</td>
<td>50%</td>
</tr>
<tr>
<td>Certificate of attendance from a dental surgery</td>
<td>10%</td>
</tr>
<tr>
<td>Submitted documentation</td>
<td>10%</td>
</tr>
<tr>
<td>Interview</td>
<td>30%</td>
</tr>
</tbody>
</table>

Shortlisted students 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.
10.3.3. **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.

10.3.4. **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.

10.3.5. **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.

10.3.6 **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.

10.3.7 **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.

10.3.8 **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)*.

10.3.9 **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.

10.4 **SUBJECT CONTENT FOR:**
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 (OAPA101)**

**Assessment Plan**

| Theory Tests | 40% |
| Examination  | 60% |

**Topics Covered**

Microbiology, Oral Anatomy and Physiology

**DENTAL ASSISTING PRACTICAL IA (DAPA101)**

**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**
SEMESTER 2

DENTAL ASSISTING THEORY IB (DATB101)
Assessment Plan
Theory Tests  40%
Examination  60%
Topics Covered
Nutrition, Oral Hygiene, Conservative Dentistry, Dental Specialities

ORAL ANATOMY AND PATHOLOGY IB (OAPB101)
Assessment Plan
Theory Tests  40%
Examination  60%
Topics Covered
Oral Pathology  
Medical Emergencies  
Cariology  

DENTAL ASSISTING PRACTICAL IB (DAPB101)
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)
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory Tests</td>
<td>40%</td>
</tr>
<tr>
<td>Examination</td>
<td>60%</td>
</tr>
</tbody>
</table>