6. **DEPARTMENT OF DENTAL SCIENCES**

6.1 **NATIONAL CERTIFICATE: DENTAL ASSISTING**

Course code: NCDS91

<table>
<thead>
<tr>
<th>Code</th>
<th>Subject</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAP110T</td>
<td>Dental Assisting Practical I</td>
<td>(0,175)</td>
</tr>
<tr>
<td>DAT110T</td>
<td>Dental Assisting Theory I</td>
<td>(0,175)</td>
</tr>
<tr>
<td>DAT11PT</td>
<td>Dental Assisting Theory: Dental Assisting I</td>
<td>(0,088)</td>
</tr>
<tr>
<td>DAT11QT</td>
<td>Dental Assisting Theory: Dental Radiography I</td>
<td>(0,087)</td>
</tr>
<tr>
<td>DPM100T</td>
<td>Dental Practice Management I</td>
<td>(0,175)</td>
</tr>
<tr>
<td>EXP1DET</td>
<td>Experiential Learning I</td>
<td>(0,300)</td>
</tr>
<tr>
<td>OAP100T</td>
<td>Oral Anatomy and Pathology I</td>
<td>(0,175)</td>
</tr>
</tbody>
</table>

**REMARKS**

a. Admission requirement(s): A Senior Certificate or an equivalent qualification with a pass of 50% in one of the following subjects at Standard Grade: Biology, Physiology, Mathematics or Science.

b. Selection criteria: A Potential Assessment test and a personal interview. Prospective students should arrange a selection interview with the Head of the Department.

c. Recommended subject(s): Biology, Mathematics, Physical Science and Physiology.

d. Minimum duration: One year.

e. Presentation: One year: day classes or two years: part-time (only applicable to students already employed in a dental practice).

f. Intake for the course: January only.

g. Registration for the subjects of this course: January only.

h. Additional expenses: Required uniforms: approximately **R1 000**. Glass slab and spatula: approximately **R350**. Awards function: approximately **R300**.

i. Other requirements: A valid first-aid certificate. First-aid courses are arranged by the University. Immunisation against Hepatitis B is compulsory.

j. Experiential Learning I: See Chapter 5 of Students’ Rules and Regulations.

k. Readmission: See Chapter 3 of Students’ Rules and Regulations.

l. Subject credits: Subject credits are shown in brackets after every subject.

**YEAR SUBJECTS**

<table>
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<td>OAP100T</td>
<td>Oral Anatomy and Pathology I</td>
<td>(0,175)</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR THE QUALIFICATION:** **1,000**
6.2 NATIONAL DIPLOMA: DENTAL TECHNOLOGY  
Course code: NDDT96

Campus where offered: Pretoria Campus

Please note that the site(s) of delivery (campus(es)) indicated is/are subject to change and will still be confirmed.

REMARKS

a. Admission requirement(s): A Senior Certificate or an equivalent qualification with a pass at Standard Grade in one of the following minimum combinations: Mathematics and Physical Science or Mathematics and Biology or Physiology, or Physical Science and Biology or Physiology.

b. Selection criteria: Selection takes place in three steps. Students must be successful in each step before they may progress to the following one.  
Step 1: Potential Assessment  
Step 2: Dexterity test (if successful in step one)  
Step 3: Personal interview (if successful in step two)

c. Recommended subject(s): None.

d. Minimum duration: Three years.

e. Presentation: Day classes.

f. Intake for the course: January only.

g. Registration for the subjects of this course: January and July.

h. Other requirements: Immunisation against Hepatitis B is compulsory. Students should have access to computers and the Internet. Students should register with the South African Dental Technicians Council. Students must obtain approved first-aid certificates to be admitted to the third-year examinations of the National Diploma. First-aid courses are usually arranged by the Department. Faculty and statutory rules and regulations will be applicable to students who register for this course. It is the responsibility of the students to familiarise themselves with these rules and regulations. In addition to tuition fees, an amount of approximately R17 000 will be required in the first year for personal instruments. These will remain the property of the student. Students are responsible for purchasing these instruments themselves. NB: a dental technician in possession of a National Diploma may only practise his or her profession as an employee and may not supervise a dental laboratory. NB: students must be in possession of the Baccalaureus Technologiae: Dental Technology before they will be allowed to practise as dental technologists. Students with National Diplomas may be employed as dental technicians.

i. Readmission: See Chapter 3 of Students’ Rules and Regulations.

j. Subject credits: Subject credits are shown in brackets after every subject.

Key to asterisks
* Information does not correspond with information in Report 151.  
(Deviations approved by the Senate in August 2005.)
## FIRST YEAR

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
<th>PREREQUISITE SUBJECT(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT100T</td>
<td>Applied Dental Technology I</td>
<td>(0.170)</td>
<td></td>
</tr>
<tr>
<td>DMS100T</td>
<td>Dental Materials Science I</td>
<td>(0.350)</td>
<td></td>
</tr>
<tr>
<td>DTT100T</td>
<td>Dental Technology Theory I</td>
<td>(0.240)</td>
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</table>

plus one of the following subjects:

<table>
<thead>
<tr>
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<th>SUBJECT</th>
<th>CREDIT</th>
<th>PREREQUISITE SUBJECT(S)</th>
</tr>
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<tbody>
<tr>
<td>CEN150T</td>
<td>Communication I</td>
<td>(0.080)</td>
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</tr>
<tr>
<td>KOM150T</td>
<td>Kommunikasie I</td>
<td>(0.080)</td>
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</table>

### FIRST SEMESTER

<table>
<thead>
<tr>
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<th>PREREQUISITE SUBJECT(S)</th>
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<tbody>
<tr>
<td>OAT101T</td>
<td>Oral Anatomy I</td>
<td>(0.080)</td>
<td></td>
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</table>

### SECOND SEMESTER

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
<th>PREREQUISITE SUBJECT(S)</th>
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<tbody>
<tr>
<td>TMY101T</td>
<td>Tooth Morphology I</td>
<td>(0.080)</td>
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</tr>
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</table>

**TOTAL CREDITS FOR THE FIRST YEAR:** 1,000

### SECOND YEAR

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
<th>PREREQUISITE SUBJECT(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT200T</td>
<td>Applied Dental Technology II</td>
<td>(0.250)</td>
<td>Applied Dental Technology I</td>
</tr>
<tr>
<td>DMS200T</td>
<td>Dental Materials Science II</td>
<td>(0.330)*</td>
<td>Dental Materials Science I</td>
</tr>
<tr>
<td>DTT200T</td>
<td>Dental Technology Theory II</td>
<td>(0.250)</td>
<td>Dental Technology Theory I</td>
</tr>
<tr>
<td>JUR100T</td>
<td>Jurisprudence I</td>
<td>(0.170)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR THE SECOND YEAR:** 1,000

### THIRD YEAR

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
<th>PREREQUISITE SUBJECT(S)</th>
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<tbody>
<tr>
<td>ANT300T</td>
<td>Applied Dental Technology III</td>
<td>(0.200)</td>
<td>Applied Dental Technology II</td>
</tr>
<tr>
<td>BNP110B</td>
<td>Business Practice I</td>
<td>(0.170)</td>
<td></td>
</tr>
<tr>
<td>DMS300T</td>
<td>Dental Materials Science III</td>
<td>(0.350)</td>
<td>Dental Materials Science II</td>
</tr>
<tr>
<td>DTT300T</td>
<td>Dental Technology Theory III</td>
<td>(0.280)</td>
<td>Dental Technology Theory II</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR THE THIRD YEAR:** 1,000

### 6.3 BACCALAUREUS TECHNOLOGIAE: DENTAL TECHNOLOGY

**Course code: BTDT96**

| Campus where offered: | Pretoria Campus |

Please note that the site(s) of delivery (campus(es)) indicated is/are subject to change and will still be confirmed.

### REMARKS

- **a. Admission requirement(s):** A National Diploma: Dental Technology or an equivalent qualification.
- **b. Selection criteria:** Selection is based on academic performance, professional and ethical behaviour during the previous years of study, and an interview.
- **c. Minimum duration:** One year.
- **d. Presentation:** Day classes.
e. Intake for the course: January only.

f. Registration for the subjects of this course: January only.

g. Other requirements: Students should have access to computers and the Internet. Students should register as students and technicians with the South African Dental Technicians Council. Faculty and statutory rules and regulations will be applicable to students who register for this course. It is the responsibility of students to familiarise themselves with these rules and regulations. NB: students must be in possession of the Baccalaureus Technologiae: Dental Technology before they will be allowed to practise as dental technologists. Students with National Diplomas may be employed as dental technicians.

h. Readmission: See Chapter 3 of Students’ Rules and Regulations.

i. Subject credits: Subject credits are shown in brackets after every subject.

### YEAR SUBJECTS

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNP200B</td>
<td>Business Practice II</td>
<td>(0,200)</td>
</tr>
<tr>
<td>DMS400T</td>
<td>Dental Materials Science IV</td>
<td>(0,250)</td>
</tr>
<tr>
<td>DTN410T</td>
<td>Dental Technology IV</td>
<td>(0,350)</td>
</tr>
<tr>
<td>RMQ110B</td>
<td>Research Methods and Techniques I</td>
<td>(0,200)</td>
</tr>
</tbody>
</table>

TOTAL CREDITS FOR THE QUALIFICATION: **1,000**

### 6.4 MAGISTER TECHNOLOGIAE: DENTAL TECHNOLOGY

**Course code:** MTDT95

Campus where offered: Pretoria Campus

Please note that the site(s) of delivery (campus(es)) indicated is/are subject to change and will still be confirmed.

#### REMARKS

a. Admission requirement(s): A Baccalaureus Technologiae: Dental Technology or an equivalent qualification.

b. Selection criteria: All applications are subject to selection.

c. Duration: A minimum of one year and a maximum of three years.

d. Structure: The course comprises an applied or basic research project, to be submitted as a dissertation.

e. Subject credits: Subject credits are shown in brackets after every subject.

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTN500T</td>
<td>Dissertation: Dental Technology</td>
<td>(1,000)</td>
</tr>
<tr>
<td>DTN500R</td>
<td>Dissertation: Dental Technology (re-registration)</td>
<td>(0,000)</td>
</tr>
</tbody>
</table>

TOTAL CREDITS FOR THE QUALIFICATION: **1,000**
6.5 DOCTOR TECHNOLOGIAE: DENTAL TECHNOLOGY

Course code: DTDT96

Campus where offered: Pretoria Campus

Please note that the site(s) of delivery (campus(es)) indicated is/are subject to change and will still be confirmed.

REMARKS

a. Admission requirement(s): A Magister Technologiae: Dental Technology or an equivalent qualification, evaluated by the Department of Education as M+5.

b. Selection criteria: All applications are subject to selection.

c. Duration: A minimum of two years and a maximum of five years.

d. Structure: The course comprises an advanced research project and a thesis.

e. Enquiries: Further particulars are obtainable from the Head of the Department on request.

f. Subject credits: Subject credits are shown in brackets after every subject.

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUBJECT</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTN700T</td>
<td>Thesis: Dental Technology</td>
<td>(2,000)</td>
</tr>
<tr>
<td>DTN700R</td>
<td>Thesis: Dental Technology (re-registration)</td>
<td>(0,000)</td>
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</tbody>
</table>

TOTAL CREDITS FOR THE QUALIFICATION: 2,000

6.6 SUBJECT INFORMATION

SUBJECT NAME: APPLIED DENTAL TECHNOLOGY I
SUBJECT CODE: ANT100T
EVALUATION METHOD: PRACTICAL ASSESSMENT
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
The manufacturing of all types of full dentures. The use and handling of materials and equipment that are important in prosthetic work.

SUBJECT NAME: APPLIED DENTAL TECHNOLOGY II
SUBJECT CODE: ANT200T
EVALUATION METHOD: PRACTICAL ASSESSMENT
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
The design and manufacture of all types of dentures, orthodontic appliances and mouth guards. These include clinical work received from the clinics. Full metal crowns, temporary crowns and posts are also constructed.

SUBJECT NAME: APPLIED DENTAL TECHNOLOGY III
SUBJECT CODE: ANT300T
EVALUATION METHOD: PRACTICAL ASSESSMENT
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
The construction of full metal crowns and bridges with acrylic veneers, as well as metal constructions for porcelain crowns, prosthetics, orthodontics and cobalt chrome.
SUBJECT NAME: BUSINESS PRACTICE I
SUBJECT CODE: BNP110B
EVALUATION METHOD: 1 X 3-HOUR PAPER
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
Basic accounting, as well as the layout of offices and the management and administration of a business.

SUBJECT NAME: BUSINESS PRACTICE II
SUBJECT CODE: BNP200B
EVALUATION METHOD: 1 X 3-HOUR PAPER
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
A study of basic management skills, how to handle conflict, marketing, personnel management, stock control and cash flow.

SUBJECT NAME: COMMUNICATION I
SUBJECT CODE: CEN150T
EVALUATION METHOD: 1 X 3-HOUR PAPER
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
Basic communication skills and professionalism.

SUBJECT NAME: DENTAL ASSISTING PRACTICAL I
SUBJECT CODE: DAP110T
EVALUATION METHOD: PRACTICAL ASSESSMENT
TOTAL TUITION TIME: ± 130 hours
OVERVIEW OF SYLLABUS:
General orientation and maintenance of the dental surgery, clinical asepsis, clinical dental disciplines, the processing of X-ray film, the preparation of dental materials.

SUBJECT NAME: DENTAL ASSISTING THEORY: DENTAL ASSISTING I
SUBJECT CODE: DAT11PT
EVALUATION METHOD: 1 X 3-HOUR PAPER
TOTAL TUITION TIME: ± 115 hours
OVERVIEW OF SYLLABUS:
Dental terminology, disinfection and sterilisation, anaesthetics, dental principles and dental materials.

SUBJECT NAME: DENTAL ASSISTING THEORY: DENTAL RADIOGRAPHY I
SUBJECT CODE: DAT11QT
EVALUATION METHOD: 1 X 2-HOUR PAPER
TOTAL TUITION TIME: ± 65 hours
OVERVIEW OF SYLLABUS:
Basic principles of X-rays, principles of radiographic examination techniques and preventive methods.

SUBJECT NAME: DENTAL MATERIALS SCIENCE I
SUBJECT CODE: DMS100T
EVALUATION METHOD: 1 X 3-HOUR PAPER
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
Dental materials, such as gypsum, wax, impression materials, acrylics and abrasive and polishing agents. Basic chemistry and physics applicable to dental materials.

SUBJECT NAME: DENTAL MATERIALS SCIENCE II
SUBJECT CODE: DMS200T
EVALUATION METHOD: 1 X 3-HOUR PAPER
TOTAL TUITION TIME: Not available
OVERVIEW OF SYLLABUS:
Dental materials, such as inlay materials. Dental alloys and physical properties of materials. Basic chemistry and physics that apply to dental materials.
SUBJECT NAME:  DENTAL MATERIALS SCIENCE III  
SUBJECT CODE:  DMS300T  
EVALUATION METHOD:  1 X 3-HOUR PAPER  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
A continuation of the study of dental materials. Implants, cross-infection and safety in the laboratory. Basic chemistry and physics that apply to dental materials.

SUBJECT NAME:  DENTAL MATERIALS SCIENCE IV  
SUBJECT CODE:  DMS400T  
EVALUATION METHOD:  1 X 3-HOUR PAPER  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
A continuation of the study of dental materials, especially metals and precious metals used in metal constructions for porcelain crowns and bridges. Health hazards in the dental laboratory. Basic chemistry and physics that apply to dental materials.

SUBJECT NAME:  DENTAL PRACTICE MANAGEMENT I  
SUBJECT CODE:  DPM100T  
EVALUATION METHOD:  1 X 3-HOUR PAPER  
TOTAL TUITION TIME:  ±93 hours  
OVERVIEW OF SYLLABUS:  
Introduction to dentistry, working area, telephone technique, appointments, records and filing, mail, finance and dental stock, human relations, ethics and jurisprudence, introduction to computer literacy.

SUBJECT NAME:  DENTAL TECHNOLOGY IV  
SUBJECT CODE:  DTN410T  
EVALUATION METHOD:  1 X 3-HOUR PAPER AND PRACTICAL ASSESSMENT  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
Theory and practice of crown and bridge work, orthodontic and surgical equipment, including full metal crowns, porcelain crowns, orthodontic apparatus and maxillary-facial prostheses.

SUBJECT NAME:  DENTAL TECHNOLOGY THEORY I  
SUBJECT CODE:  DTT100T  
EVALUATION METHOD:  1 X 3-HOUR PAPER  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
Theory of the construction of full dentures.

SUBJECT NAME:  DENTAL TECHNOLOGY THEORY II  
SUBJECT CODE:  DTT200T  
EVALUATION METHOD:  1 X 3-HOUR PAPER  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
Theory of the construction of orthodontic appliances, as well as partial dentures and full metal crowns and bridges, temporary crowns and posts.

SUBJECT NAME:  DENTAL TECHNOLOGY THEORY III  
SUBJECT CODE:  DTT300T  
EVALUATION METHOD:  1 X 3-HOUR PAPER  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
Theory of crown and bridge work, including full metal crowns with acrylic veneers and metal constructions for porcelain crowns and bridges.

SUBJECT NAME:  EXPERIENTIAL LEARNING I  
SUBJECT CODE:  EXP1DET  
EVALUATION METHOD:  EXPERIENTIAL LEARNING  
TOTAL TUITION TIME:  Not available  
OVERVIEW OF SYLLABUS:  
Practical application in a work situation of theoretical subjects in the first year.
**SUBJECT NAME:** JURISPRUDENCE I  
**SUBJECT CODE:** JUR100T  
**EVALUATION METHOD:** 1 X 3-HOUR PAPER  
**TOTAL TUITION TIME:** Not available  
**OVERVIEW OF SYLLABUS:**  
Legal aspects of dental technology in South Africa.

**SUBJECT NAME:** KOMMUNIKASIE I  
**SUBJECT CODE:** KOM150T  
**EVALUATION METHOD:** 1 X 3-HOUR PAPER  
**TOTAL TUITION TIME:** Not available  
**OVERVIEW OF SYLLABUS:**  
Basic communication skills and professionalism.

**SUBJECT NAME:** ORAL ANATOMY I  
**SUBJECT CODE:** OAT101T  
**EVALUATION METHOD:** 1 X 2-HOUR PAPER  
**TOTAL TUITION TIME:** Not available  
**OVERVIEW OF SYLLABUS:**  
The study of the bone structures, muscles, joints and nervous system of the human skull.

**SUBJECT NAME:** ORAL ANATOMY AND PATHOLOGY I  
**SUBJECT CODE:** OAP100T  
**EVALUATION METHOD:** 1 X 3-HOUR PAPER  
**TOTAL TUITION TIME:** ± 98 hours  
**OVERVIEW OF SYLLABUS:**  
Anatomical landmarks in dentistry, salivary glands, muscles, blood and nerve supply, development of the face and oral cavity, oral microbiology, oral pathology, elementary pharmacology, clinical emergencies.

**SUBJECT NAME:** RESEARCH METHODS AND TECHNIQUES I  
**SUBJECT CODE:** RMQ110B  
**EVALUATION METHOD:** 1 X 3-HOUR PAPER  
**TOTAL TUITION TIME:** Not available  
**OVERVIEW OF SYLLABUS:**  
Theory of research and statistics, as well as statistical calculations.

**SUBJECT NAME:** TOOTH MORPHOLOGY I  
**SUBJECT CODE:** TMY101T  
**EVALUATION METHOD:** 1 X 3-HOUR PAPER  
**TOTAL TUITION TIME:** Not available  
**OVERVIEW OF SYLLABUS:**  
The development, growth and formation of human teeth.