REMARKS

a. Admission requirement(s) and selection criteria:

- **FOR APPLICANTS WHO OBTAINED A SENIOR CERTIFICATE BEFORE 2008:**

  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.

- **FOR APPLICANTS WHO OBTAINED A NATIONAL SENIOR CERTIFICATE IN OR AFTER 2008:**

  Admission requirement(s):
  A National Senior Certificate with a bachelor’s degree or a diploma endorsement, or an equivalent qualification, with an achievement level of at least 4 for English (home language or first additional language) and 3 for Mathematics or Technical Mathematics or 4 for Mathematical Literacy and 3 for Life Sciences or 3 for Physical Sciences or Technical Sciences.

  Selection criteria:
  To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least 19 (with Mathematics or Technical Mathematics) or 20 (with Mathematical Literacy).

b. Assessment procedure(s):

  Selection is done in accordance with the South African Dental Technicians Council. Selection takes place in four steps. The weight of each step is given in brackets.
  - Step 1: Academic performance (40%);
  - Step 2: Potential assessment (20%);
  - Step 3: Dexterity test (30%); and
  - Step 4: Personal interview (10%).

  Please take note that all completed applications received within the published due dates will be ranked. After consideration of the Departmental Student Enrolment Plan, only the top ranking applicants will be selected. Once a programme is full, a waiting list will be in place to provide an opportunity for applicants to fill places of those who did not register on time. Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, www.tut.ac.za.

c. Recognition of Prior Learning (RPL), equivalence and status:

  See Chapter 30 of Students' Rules and Regulations.

d. Intake for the qualification:

  January only.

e. Presentation:

  Day classes.

f. Minimum duration:

  Three years.
g. **Exclusion and readmission:**
   See Chapter 2 of Students’ Rules and Regulations.

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; this will be
done by the Department.
   - Students must obtain approved first-aid certificates to be admitted to the third-year
   examinations of the National Diploma. First-aid programmes are usually arranged by the
   Department.
   - Faculty and statutory rules and regulations will apply to students who register for this
   qualification. It is the responsibility of the students to familiarise themselves with these
   rules and regulations.
   - In addition to tuition fees and textbooks, an amount of approximately R30 000 for personal
   instruments will be required. These will remain the property of the student. Students are
   responsible for purchasing these instruments themselves.

i. **Special qualification rules:**
   Special qualification rules apply, and students who register for this qualification will receive
   the rules with their letter of acceptance. It is the students’ own responsibility to familiarise
   themselves with those rules.

### CURRICULUM

#### FIRST YEAR

<table>
<thead>
<tr>
<th>CODE</th>
<th>MODULE</th>
<th>NQF-L</th>
<th>CREDIT</th>
<th>PREREQUISITE MODULE(S)</th>
</tr>
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<tbody>
<tr>
<td>ADH105D</td>
<td>Applied Dental Technology I</td>
<td>(5)</td>
<td>(30)</td>
<td></td>
</tr>
<tr>
<td>CAP105X</td>
<td>Communication for Academic Purposes</td>
<td>(5)</td>
<td>(10)</td>
<td></td>
</tr>
<tr>
<td>CPL105X</td>
<td>Computer Literacy</td>
<td>(5)</td>
<td>(10)</td>
<td></td>
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</tbody>
</table>
| DLM105D | Dental Laboratory Management I       | (5)   | (18)   | Applied Dental Technology I, Dental
| DMS105D | Dental Materials Science I           | (5)   | (12)   | Materials Science I, Dental Technology
| DTT105D | Dental Technology Theory I           | (5)   | (12)   | Theory I, Dental Technology Theory I   |
| INL125D | Information Literacy (block module) | (5)   | (2)    |                                        |
| LFS125X | Life Skills (block module)           | (5)   | (2)    |                                        |
| OAT105D | Oral Anatomy and Tooth Morphology   | (5)   | (24)   |                                        |

**TOTAL CREDITS FOR THE FIRST YEAR:** 120

#### SECOND YEAR

<table>
<thead>
<tr>
<th>CODE</th>
<th>MODULE</th>
<th>NQF-L</th>
<th>CREDIT</th>
<th>PREREQUISITE MODULE(S)</th>
</tr>
</thead>
</table>
| ADH206D | Applied Dental Technology II   | (6)   | (33)   | Applied Dental Technology I, Dental
| DLM206D | Dental Laboratory Management II | (6)   | (18)   | Materials Science I, Dental Laboratory
| DMS206D | Dental Materials Science II    | (6)   | (15)   | Materials Science I, Dental Technology
| DTT206D | Dental Technology Theory II    | (6)   | (15)   | Theory I, Dental Technology Theory I   |
| JUR205D | Jurisprudence                 | (5)   | (15)   |                                        |
WDT226D WIL in Dental Technology II (block module) (6) (24) Applied Dental Technology I Dental Materials Science I Dental Technology Theory I

TOTAL CREDITS FOR THE SECOND YEAR: 120

THIRD YEAR

<table>
<thead>
<tr>
<th>CODE</th>
<th>MODULE</th>
<th>NQF-L</th>
<th>CREDIT</th>
<th>PREREQUISITE MODULE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SP305D</td>
<td>Business Practice I</td>
<td>(5)</td>
<td>(12)</td>
<td>Applied Dental Technology II</td>
</tr>
<tr>
<td>ADH306D</td>
<td>Applied Dental Technology III</td>
<td>(6)</td>
<td>(36)</td>
<td>Applied Dental Technology II Dental Materials Science II Dental Technology Theory II</td>
</tr>
<tr>
<td>DLM306D</td>
<td>Dental Laboratory Management III</td>
<td>(6)</td>
<td>(18)</td>
<td>Dental Laboratory Management II</td>
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<tr>
<td>DMS306D</td>
<td>Dental Materials Science III</td>
<td>(6)</td>
<td>(15)</td>
<td>Applied Dental Technology II Dental Materials Science II Dental Technology Theory II</td>
</tr>
<tr>
<td>DTT306D</td>
<td>Dental Technology Theory III</td>
<td>(6)</td>
<td>(15)</td>
<td>Applied Dental Technology II Dental Materials Science II Dental Technology Theory II</td>
</tr>
<tr>
<td>WDT326D</td>
<td>WIL in Dental Technology III (block module)</td>
<td>(6)</td>
<td>(24)</td>
<td>Applied Dental Technology II Dental Materials Science II Dental Technology Theory II WIL in Dental Technology II</td>
</tr>
</tbody>
</table>

TOTAL CREDITS FOR THE THIRD YEAR: 120

TOTAL CREDITS FOR THE QUALIFICATION: 360

MODULE INFORMATION (OVERVIEW OF SYLLABUS)
Please take note that for the 2020 academic year certain modules will be assessed as continuous assessment. Please contact the Academic Department for further information.

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. On 18 November 2019, the syllabus content was defined as follows:

A

APPLIED DENTAL TECHNOLOGY I (ADH105D) PRACTICAL EVALUATION
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
The manufacturing of all types of full dentures. The use and handling of materials and equipment that is important in prosthetic work. (Total tuition time: ± 544 hours)

APPLIED DENTAL TECHNOLOGY II (ADH206D) PRACTICAL EVALUATION
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
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. (Total tuition time: ± 816 hours)

APPLIED DENTAL TECHNOLOGY III (ADH306D) PRACTICAL EVALUATION
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
The construction of full metal crowns and bridges with acrylic veneers, as well as metal constructions for porcelain crowns, prosthetics, orthodontics and cobalt chrome. (Total tuition time: ± 850 hours)
B

BUSINESS PRACTICE I (1SP305D)  1 X 3-HOUR PAPER
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
Basic accounting, as well as the layout of offices and the management and administration of a business. (Total tuition time: ± 68 hours)

C

COMMUNICATION FOR ACADEMIC PURPOSES (CAP105X)  1 X 3-HOUR PAPER
(Module custodian: Department of Applied Languages)
A workable knowledge of English is an essential skill for any graduate who is required to conduct themselves successfully in a professional working environment. This module will equip students with the competencies required to compose a selection of written texts related to communicating both internally and externally within a professional environment. In addition, the module includes strategies that are essential for the effective communication in various situations, including small groups to avoid unproductive conflict, a multicultural context, etc. (Total tuition time: not available)

COMPUTER LITERACY (CPL105X)  CONTINUOUS ASSESSMENT
(Module custodian: End User Computing Unit)
Introduction of information literacy. Development of a search strategy and application of a search string to search engines and academic databases. Evaluation of information sources. Ethical and legal use of information. (Total tuition time: not available)

D

DENTAL LABORATORY MANAGEMENT I (DLM105D)  1 X 3-HOUR PAPER
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
Dental laboratory management - Work ethics and personal presentation; Health and safety in the workplace; basics of electricity, plumbing, gas and equipment; Optimal use of materials; Diversity in the workplace. Quality systems - Introduction to quality systems; Purpose/objectives of a QMS; Definitions; Total quality management of a six sigma; and Roles of employee and employer. (Total tuition time: not available)

DENTAL LABORATORY MANAGEMENT II (DLM206D)  1 X 3-HOUR PAPER
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
Dental laboratory management - Interpreting work slips; Professional communication; Principles of stock control; Coping with personal challenges; Career planning; Maintenance and use of equipment relative to year of study. Quality systems - Overview of ISO 9000 systems; Overview of medical devices QMS internationally; Medical devices QMS requirements – South Africa; ISO 9000 systems as basis of ISO 13485; and Overview of ISO 13485 with focus on custom-made devices. (Total tuition time: not available)

DENTAL LABORATORY MANAGEMENT III (DLM306D)  1 X 3-HOUR PAPER
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
Dental laboratory management - Record keeping; Invoicing; Informed consent for substitution; Council regulations regarding laboratories; Conflict resolution in the work-place; Applying for work; CV writing; Interviews; Continuous professional development; Rules and regulations; and Maintenance and use of equipment relative to year of study. Quality systems - Documents that regulators expect you to maintain. The medical device regulations that apply to dental laboratories; The roles that medical device regulators expect you to Perform; The documents that ISO 13485 expects you to maintain; The procedures that ISO 13485 expects you to document; The activities that ISO 13485 expects you to document; The arrangements that ISO 13485 expects you to document; The requirements that ISO 13485 expects you to document; and Introduction to risk management. (Total tuition time: not available)

DENTAL MATERIALS SCIENCE I (DMS105D)  1 X 3-HOUR PAPER
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)
Dental materials such as gypsum, wax, impression material, acrylics and abrasive and polishing agents. Basic chemistry and physics applicable to dental materials. (Total tuition time: not available)
### DENTAL MATERIALS SCIENCE II (DMS206D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
Dental materials such as inlay material. Dental alloys and physical properties of materials. Basic chemistry and physics that apply to dental materials. (Total tuition time: not available)

### DENTAL MATERIALS SCIENCE III (DMS306D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
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. (Total tuition time: not available)

### DENTAL TECHNOLOGY THEORY I (DTT105D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
Theory of the construction of full dentures. (Total tuition time: not available)

### DENTAL TECHNOLOGY THEORY II (DTT206D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
Theory of the construction of orthodontic appliances, as well as partial dentures and full metal crowns and bridges, temporary crowns and posts. (Total tuition time: not available)

### DENTAL TECHNOLOGY THEORY III (DTT306D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
Theory of crown and bridge work, including full metal crowns with acrylic veneers and metal constructions for porcelain crowns and bridges. (Total tuition time: not available)

### INFORMATION LITERACY (INL125D)
CONTINUOUS ASSESSMENT
*(Module custodian: Directorate of Library and Information Services)*
Introduction of information literacy. Development of a search strategy and application of a search string to search engines and academic databases. Evaluation of information sources. Ethical and legal use of information. (Total tuition time: not available)

### JURISPRUDENCE (JUR205D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
Legal aspects of dental technology in South Africa. (Total tuition time: not available)

### LIFE SKILLS (LFS125X)
CONTINUOUS ASSESSMENT
*(Module custodian: Directorate of Student Development and Support)*
Academic, personal and socio-emotional skills development for students in higher education. Personal and social dimensions address: effective planning and self-management (goal setting and time management); Adjusting to university life (student life, diversity and change); Intra- and interpersonal skills development (conflict management, self-esteem, relationship management); Effective living (healthy living, HIV education, substance abuse); Academic dimension addresses: academic skills for university (e.g. critical thinking, creativity, managing assignments and assessments). (Total tuition time: not available)

### ORAL ANATOMY AND TOOTH MORPHOLOGY (OAT105D)
1 X 3-HOUR PAPER
*(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)*
Students are provided with the theoretical knowledge to understand the landmarks and anatomy during dental appliance manufacturing procedures and to prepare them to work as an employee in a dental laboratory. (Total tuition time: not available)
WIL IN DENTAL TECHNOLOGY II (WDT226D)  WORK-INTEGRATED LEARNING
WIL IN DENTAL TECHNOLOGY III (WDT326D)  WORK-INTEGRATED LEARNING
(Module custodian: Department of Sport, Rehabilitation and Dental Sciences)

A Cooperative Education programme that will enhance and enrich the student's knowledge and practice skills that were acquired in the simulated work environment in a real world setting. The student is also exposed to the tasks and practices found in such a place of work. (Total tuition time: not available)