Career Information

The department of Information Technology, situated at the Rustenburg campus, offers the following Information and Communications Technology (ICT) under-graduate qualifications:-

Bachelor of ICT degree
Diploma in ICT in Applications Development
Diploma in ICT in Business Analysis
Diploma in ICT in Applications Development (4-year)

The general information below pertains to all of the ICT programme offerings above.

Personal Attributes

An aptitude for puzzles, mathematics, logic and accuracy characterize the successful student. If you possess most of these qualities, you should consider a career in ICT.

Career Opportunities

On completion of a qualification graduates will be able to apply for the following positions: Programme Manager, Junior Analyst, Programmer/Analyst, Junior Database Administrator, End User Support, Business Analyst and many other related positions. The training offered prepares the student globally, since internationally acceptable software, textbooks, and training methods are used in all programmes.

Selection Procedure:

Meeting the minimum entry requirements does not automatically guarantee acceptance. It depends on the number of applicants and number of places allowed by DUT.

Bachelor of ICT [BICT] (Degree)

Description of the Programme

The Bachelor of ICT degree was formulated to reflect the latest workplace-based needs of the ICT industry in ensuring that qualifying learners can access employment opportunities within the industry. It is grounded in a fundamental body of computing knowledge.

Purpose of qualification

The structure and content of the BICT degree enables learners to build a solid knowledge base in the core fields of ICT and its related subjects. This qualification is intended to enhance readiness for further study in a wide variety of specializations within the Honours and Masters levels. It produces ICT graduates who are confident and articulate team players, and are attuned to the needs, methods and attitudes of business and society.

Entry Requirements for the Bachelor of ICT degree

<table>
<thead>
<tr>
<th>DEPARTMENTAL NSC REQUIREMENTS</th>
<th>DEPARTMENTAL SENIOR CERTIFICATE REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSC Degree Entry</td>
<td>A Senior Certificate with Matriculation Exemption</td>
</tr>
<tr>
<td>English (home) OR English (1st additional)</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>And at least one of the following subjects:</td>
<td>4</td>
</tr>
<tr>
<td>Physical Science OR Information Technology OR Engineering Design</td>
<td>Physical Science OR Information Technology</td>
</tr>
</tbody>
</table>

Please Note: these entrance requirement are subject to change, please check CAO and DUT website regularly.

OR

A National Certificate Vocational (NCV) Level 4 with the following minimum requirements:

- at least 60% in three fundamental subjects including English and Mathematics and
- at least 70% in four vocational subjects relevant to the field of Information Technology.

Fees:

First year are approximately R45 000.00

NB: For semester programmes there would be a single registration for semester 1 and semester 2 at the beginning of each academic year.

Curriculum

First Year: (all compulsory)

- Cornerstone 101
- Business Fundamentals 2
- Discrete Structures
- Mathematics for Computing 1A
- Systems Fundamentals

Second Year: (all compulsory)

- Systems Analysis & Design 2
- Algorithms & Data Structures 2
- Programming Languages 2
- Entrepreneurship spirit
- Law for Life

Third Year: (Compulsory)

- Software Engineering 3
- Application Project 3A
- Application Project 3B
- Industry Exposure

Electives, any 2 of the following:

- Project Management 3
- Business Intelligence 3
- Machine Intelligence 3
- Graphics 3
- Strategy Acquisition & Management 3
- Parallel & Distributed Computing 3
- Human Computer Interaction 3
- Web Systems & Technology 3

Diplomas in Information & Communications Technology

(Specialising in Applications Development and Business Analysis)

A career in ICT is a career path of endless opportunities and diversity. The Diploma in ICT offers the opportunity to work in any industry, anywhere in the world. Careers in the ICT Industry range from highly technical positions such as Software or Web Developers to more business oriented positions such as Business Analysts.

Students wishing to pursue this career path must have the character and perseverance to work in dynamic environments. A basic skill that tends to categorize an ICT specialist is the ability to think and express oneself logically; therefore, students possessing these skills would be ideal candidates for this programme.

Diploma in ICT in Applications Development

Purpose of qualification

The purpose of the diploma is to provide a professional, vocational or career focused qualification for the ICT Industry. The knowledge emphasizes general principles and applications. Further the diploma will develop learners who can demonstrate focused knowledge and skills to design and produce software products and systems to meet specified needs so that they work reliably and their production and maintenance is cost effective. This specialization expands the purpose of the qualification by enabling a graduate (diplomat) to conceptualize, design, implement & test application development solutions to address industry related ICT initiatives.

Fees:

First year are approximately R35 000.00

Curriculum

First Year:

- Cornerstone 101
- Information Systems 1
- ICT Literacy and Skills
- Me, My world, My Universe
- Operating Systems
- Applications Development Project 1

Second Year:

- Information Systems 2A
- Information Systems 2B
- Information Management 2A
- Mobile Computing 2B
- Information Management 2B
- Applications Development Project 2

Third Year:

- Information Systems 3A
- Information Systems 3B
- Entrepreneurial Spirit
- Applications Development Project 3A
- Applications Development Project 3B

Diploma in ICT in Business Analysis

Purpose of qualification

The purpose of the diploma is to provide a professional, vocational or career focused qualification for the ICT Industry. The knowledge
emphasizes general principles and applications. Furthermore, the diploma will develop students who can demonstrate focused knowledge and skills in Business Analysis and use Information and Communications Technology (ICT) in industry to solve business problems. Furthermore, they will be able to analyse business environments and create specifications for ICT solutions to facilitate the alignment of IT and business processes.

Fees: First year are approximately R35 000.00

Curriculum
First Year:
- Cornerstone 101: Fundamentals of Computer Security
- Business Fundamentals 1: Me, My world, My Universe
- ICT Literacy and skills: Applications Development 1A
- Law for Life: Applications Development 1B
- Financial Accounting I: Business Information Systems 1
- Business Analysis Project 1

Second Year:
- Business Fundamentals 2: Applications Development 2A
- Business Analysis 2A: Information Management 2A
- Information Management 2B: Applications Development 2B
- Business Analysis Project 2: Theory of Internal Auditing 2
- Business Information Systems 2: Computer Applications in Business and Finance 2

Third Year:
- Business Analysis 2A: Business Fundamentals 3A
- Business Analysis 2B: Business Analysis Project 3A
- Business Information Systems 3A: Entrepreneurial Spirit
- Business Information Systems 3B: Information Management 2A
- Business Information Systems 3B: Information Management 2B
- Theory of ICT Professional Practice 3

Entry Requirements for the Diploma in ICT in Applications Development and Diploma in ICT in Business Analysis

<table>
<thead>
<tr>
<th>NSC Diploma Entry</th>
<th>NSC Rating Code</th>
<th>Compulsory Subjects</th>
<th>HG</th>
<th>SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (home) OR English (1st additional)</td>
<td>3</td>
<td>English</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>Mathematics OR Mathematics Literacy</td>
<td>6</td>
<td>Mathematics</td>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>And two 20 credit subjects (not more than one language)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OR

A National Certificate Vocational (NCV) with:
- at least 50% in three fundamental subjects including English and Mathematics and
- at least 60% in three compulsory vocational subjects.

Note: These requirements represent the minimum and students will be ranked according to a points system based on the rating code

Closing Date for Applications: 30 September 2019
Students wishing to pursue a career in this field need to apply via the CAO before the closing date.

CAO Codes
- Bachelor of ICT degree: DU-D-BIT
- Diploma in ICT in Applications Development: DU-D-APD
- Diploma in ICT in Business Analysis: DU-D-BUA
- Diploma in ICT in Applications Development (4-year Foundation): DU-D-APF

For further information, contact the Department of Information Technology, Block B, 2nd Floor, Ritson Campus
Tel: 031 373 5596/63/95/46
Email: ITdept@dut.ac.za

Application forms
Contact the Central Applications Office (C.A.O)
Private Bag X06, Dalbridge, 4014
Tel: 031 268 4444
Fax: 031 268 2244
Apply online on http://www.cao.ac.za