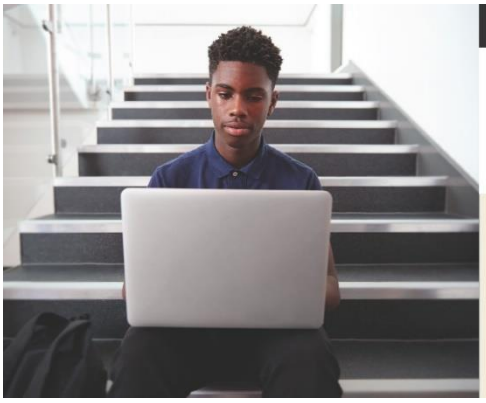

CAREER INFORMATION 2024

BACHELOR OF INFORMATION AND COMMUNICATIONS TECHNOLOGY IN **INTERNET OF THINGS (IOT)**

DUT DURBAN UNIVERSITY OF TECHNOLOGY INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE

FACULTY OF ACCOUNTING & INFORMATICS

DEPARTMENT OF INFORMATION SYSTEMS

01 JAN - 31DEC 2024

Bachelor of Information and Communications Technology in Internet of Things (IoT)

NQF Level: 7

Qualification Code: BICIOT

Location: Ritson Campus (Block B: 2nd Floor)

Description of the Programme

The Bachelor of ICT IoT 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 the Programme

The structure and content of the BICT degree IoT enable learners to build a solid knowledge base in ICT & IoT. This qualification is intended to enhance readiness for further study in various 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.

Personal Attribute

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

Explanation of Points scale:

SENIOR CERTIFICATE (SC)		
SYMBOL	HIGHER GRADE	STANDARD GRADE
A	8	6
B	7	5
C	6	4
D	5	3
E	4	2
F	3	1

NATIONAL SENIOR CERTIFICATE (NSC)		
%	LEVEL	POINTS
90-100	7	8
80-89%	7	7
70-79%	6	6
60-69%	5	5
50-59%	4	4
40-49%	3	3
30-39%	2	2
20-29%	1	1

MINIMUM ADMISSION REQUIREMENTS

GENERAL ADMISSION REQUIREMENTS

A person will only be considered for registration for an instructional programme approved by the Institution's Senate if the person complies with:

(a) The minimum admission requirements stated in DUT general handbook (refer to DUT website for general handbook).
(b) Institutional faculty, departmental and/or instructional programme specific rules; and

MINIMUM ADMISSION REQUIREMENTS IN TERMS OF THE HIGHER EDUCATION QUALIFICATIONS SUB-FRAMEWORK (HEQSF)

G7 rule: For Bachelor's Degree:
"a National Senior Certificate (NSC) as certified by the Council for General and Further Education and Training (Umalusi), with a minimum achievement rating of 3 for English and a minimum achievement rating of 4 in four NSC 20-credit subjects chosen from the NSC designated subject list".

Entry Requirements: (Bachelor of ICT: Internet of Things)

NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009)		SENIOR CERTIFICATE (SC) (PRE 2009)		NATIONAL CERTIFICATE VOCATIONAL (NCV)	
NSC DEGREE ENTRY		SENIOR CERTIFICATE (SC) with Matric Exemption		(NCV) LEVEL 4	
Compulsory Subjects	**NSC Rating Code**	**Compulsory Subjects**	**HG**	**Compulsory Subjects**	**Mark**
English	4	English	D	At least 60% in **THREE** fundamental subjects including English,	60%
Mathematics	4	Mathematics	D		
Physical Sciences **OR**	4	Physical Sciences Or	D	At least 70% in **FOUR** vocational subjects relevant to the field of Information Technology.	70%
Information Technology	4	Information Technology	D		
In addition: **two** recognized NSC 20 credit subjects as per G7 stated above	4				
Selection Procedure: Meeting the minimum entry requirements does not automatically guarantee acceptance. It depends on the number of applicants and the number of places allowed by the DUT.					

OR

Admission Requirement based upon Work Experience, Age and Maturity

For admission to entry level degree studies:
A person may, subject to such requirements as the Senate may determine, be ad-mitted if such a person is in possession of a National Senior Certificate, Senior Certificate, or an equivalent certificate, but lacks the minimum requirements for admission to the degree provided that:

- The person shall have reached the age of 23 in the first year of registration and shall have at least:
  - three years' appropriate work experience; and/or
  - capacity for the proposed instructional programme, which shall be assessed by a Senate- approved admission assessment comprising of a DUT Standardised Assessment Test for Access

    and Placement (SATAP), Academic Literacies (AL) & English for Academic Purposes (EAP) (2,5 hours) and/or an appropriate subject or programme specific written assessment designed and marked by the relevant Department; and the person has obtained
- A conditional certificate of exemption from the Matriculation Board (when in possession of the Senior Certificate (SC)); OR has met
- The requirements for Senate discretionary admission (when in possession of the NSC or equivalent), where Senate is satisfied the applicant has shown sufficient academic ability to ensure success, and that the person's standard of communication skills, and/or work experience are such that the person, in the opinion of the Senate, should be able to complete the proposed instructional programme successfully.
- The person's application for admission in terms of with work experience, age and maturity is approved prior to registration.

Applicants intending to gain admission through work experience, age and maturity must submit their applications at least four months before commencement of the academic year inclusive of the date of scheduling writing a requisite eligibility assessment.

Tuition Fees: **2024** fees are not yet final.

First Year Curriculum (Bachelor of ICT in Internet of Things)

First Year Curriculum			
Semester One	**Subject Code**	**HEQSF Level**	**SAQA Credits**
Analog and Digital Circuits	AADC101	5	12
Engineering Mathematics 1A	ENMA101	5	12
Information and Communication Literacy and Skills	ICLK101	5	8
Introduction to Programming	INPR101	5	8
Introduction to Operating Systems	ITOS101	5	12
Principles of Computer Composition	POCC101	5	8
Semester Two			
Basic Application of Artificial Intelligence	BAAI102	5	12
Business Fundamentals 1	BSFN102	6	12
Cornerstone 101	CSTN101	5	12
Engineering Mathematics 1B	ENMA102	5	12
Sensor Principles and Technology	SPAT102	5	12
TOTAL CREDITS SEMESTER 1&2			**120**

Second Year Curriculum			
Semester One	**Subject Code**	**HEQSF Level**	**SAQA Credits**
Business Fundamentals	BSFN211	6	12
Discrete Structures	DSST201	6	16
Embedded Micro-Controller Technology	EMCC201	6	12
IoT Identification Technology	ITIT201	6	8
Programming Paradigms	PRPD201	6	12
Semester Two			
Data Management	DTMG202	6	12
Introduction to Wireless Networking Technology	IWNT202	6	8
Law for Life	LWLF101	6	8
Mobile Operating System Technology and Application	MOS202	6	12
Narrow Band – IoT	NBIT202	6	8
Web Development	WBDV202	6	12
TOTAL CREDITS SEMESTER 1&2			**120**

Third Year Curriculum			
Semester One	**Subject Code**	**HEQSF Level**	**SAQA Credits**
Business Process Engineering	BSPE301	7	12
Cloud Computing	CLCM301	7	12
IoT Data Analysis	ITDA301	7	24
IoT Project Planning and Implementation	ITPI301	7	12
Mobile Development	MBDV301	7	12
Research Skills	ITRS301	7	12
Semester Two			
Entrepreneurial Spirit	ENSP101	7	12
IoT Project	IOTP302	7	36
IoT Security	IOTS302	7	12
TOTAL CREDITS SEMESTER 1&2			**144**

Application

Applicants who wish to enrol for the programme must apply through the CAO system by no later than 30 September of the previous year.

For Application Forms:

Contact the Central Applications Office (CAO)

Address Letters to:

Private Bag X06
Dalbridge
4014
Tel: (031) 2684444
Fax: (031) 2682244

OR

Apply online on http://www.cao.ac.za

For further information:

Contact the Department of Information Systems,
Block B, 2nd Floor.
Ritson Campus
Tel: 031 3735595
Email: ISdept@dut.ac.za

CAO Codes: DU-D-IOT

Closing Date for Applications: 30 September 2023

Financial Aid:

For Financial Aid application for a DUT programme please apply online at www.nsfas.org.za or call the NSFAS call centre on 0860 067 327.

For an explanation on how to fill out the application form, please go to www.nsfas.org.za or contact the call centre on the number above.

Please note that completing a form does not guarantee Financial Aid. For further assistance, please consult the Department of Financial Aid and Scholarships on (031)373 2931/2557/2054.