

**Diploma in Analytical Chemistry** 

NQF Level: 6 SAQA ID: 98010

**Qualification Code: DIACHI** 

Location: Steve Biko Campus (\$10, Level 3)

#### **Description of the Programme**

The Diploma in Analytical Chemistry represents a level of qualification that recognizes the a specialized knowledge, skills and understanding designed to meet the needs of various chemical industries. Graduates of the diploma would be able to display competence in the application of knowledge in a broad range of varied work activities associated with a career in the Chemical and Allied Industries involving detergents, petroleum, plastics, food, pharmaceuticals, mining, water treatment, metallurgy and, in addition, educational institutions may employ graduates from this course.

Graduates are required for specific practical applications such as quality control and testing or theoretical fields such as research and development. Quality control and assurance is an especially important field where industries need to verify their standards of operation and quality of manufactured materials.

This course is designed to meet the human resource needs of the chemical and allied industries and tertiary educational institutions, by providing nationally and internationally recognized tertiary education and training to students. Students who are successful in the programme may progress to the Advanced Diploma in Analytical Chemistry followed by the Postgraduate Diploma in Analytical Chemistry/Honours in order to gain access to postgraduate study towards a Masters or Doctoral qualification.

Apart from the formal course and practical work at DUT's Chemistry laboratories, the course also includes a nine month Work Integrated Learning (WIL) component in an industrial setting where skills and knowledge acquired at the university are integrated and applied under real-life working conditions.

#### **Career opportunities**

There is therefore a growing demand for graduates in this field. Industries are supportive of the furthering education of graduates and hence opportunities exist for graduates to pursue further educational qualifications. Graduates may also apply for associate membership of South African Chemical Institute (SACI). SACI is associated with the South African Council for Natural Scientific Professions (SACNASP). The following link refers: <a href="http://www.sacnasp.org.za/about-us/voluntary-associations.html">http://www.sacnasp.org.za/about-us/voluntary-associations.html</a>

# **Explanation of Points scale:**

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SENIOR CERTIFICATE (SC)					
SYMBOL	HIGHER GRADE STANDARD GR				
Α	8	6			
В	7	5			
С	6	4			
D	5	3			
E	4	2			
F	3	I			

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%	I	I		

**Entry Requirements (Diploma in Analytical Chemistry)** 

NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009)		SENIOR CERTIFICATE (SC) (PRE 2009)			(NCV)	
NSC DIPLOMA ENT	RY	SENIOR CERTIFICA	TE (S	C)	(NCV) LEVEL 4	
Compulsory Subjects	NSC Rating Code	Compulsory Subjects	HG	SG	Compulsory Subjects (With statutory requirements for a diploma)	Mark
English	4	English	D	В	English	50%
Mathematics	4	Mathematics	D	В	Mathematics	60%
Physical Science	3	Physical Science	Е	С	Physical Science	50%
Please Note:						

Please Note:

If there are more applications than there are vacancies, then applicants will be ranked and selected based on their academic achievement in Physical Science, Mathematics.

#### OR

# Admission Requirement based upon Work Experience, Age and Maturity

#### For admission to entry level diploma and certificate studies:

A person may, subject to such requirements as the Senate may determine, be admitted to the Institution even if such a person is not in a possession of a National Senior Certificate, Senior Certificate, or an equivalent certificate, provided that:

- (a) The person shall have reached the age of 23 in the first year of registration and shall have atleast:
- · three years' appropriate work experience; and/or
- · capacity for the proposed instructional programme, which shall be assessed at the discretion of the respective Head of
  - Department by a Senate approved admission assessment comprising of a DUT Standardised Assessment Test for Access and Placement (SATAP), Academic Literacies (AI) & English for Academic Purposes (EAP) and/or an appropriate subject or programme specific written assessment designed and marked by the relevant Department; and
- (b) The relevant Faculty Board shall be satisfied that the person's standard of communication skills, ability to study successfully and/or work experience are such that the person, in the opinion of the relevant Faculty Board, should be able to complete the proposed instructional programme successfully. If required, the communication skills and study skills should be tested; and
- (c) The person's application for admission in terms of 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**

To assist you with your planning, the **2022** fees have been indicated. An increase for next year to accommodate the inflation rate can be expected.

Please Note: DUT cannot be held liable for the fees in this brochure as the 2023 fees are not yet final.

First Year Curriculum				
Name of the Module	Subject Code	HEQSF Level	SAQA Credits	2022 Fees
Semester One				
General and Inorganic Chemistry	GINC101	5	16	R7230 .00
Mathematics I	MTHCI0I	5	16	R4610.00
Physics I	PHIC101	5	16	R4610.00
Cornerstone 101	CSTN101	5	12	R3410.00
Computer Skills I	CPUSI01	5	8	R3290.00
Total		1		R23150.00
Semester Two				
Organic and Physical Chemistry	OPCHI0I	5	16	R7230.00
Analytical Chemistry I	ANCHI0I	6	20	R8540.00
Communication Skills	CCNS101	5	8	R3290.00
Select Two of the Module (Electives (IGE) from the List Below:				
Introduction to Technopreneurship <b>OR</b>	ITCHI0Î	5	8	R1980.00
Cultural Diversity OR	CLDVI0I			R2140.00
Values in the Workplace <b>OR</b>	VWKPI0I			R2270.00
Sustainable Earth Studies	SERS101			R2140.00
Total	R27590.00			
TOTAL CREDITS SEMES				

Second Year Curriculum								
Semester One								
Analytical Chemistry II	ANCH201	6	24	R2690.00				
Applied Inorganic Chemistry	APIC101	6	12	R5270.00				
Applied Organic Chemistry	APOC101	6	12	R5270.00				
Applied Physical Chemistry	APPC101	6	12	R5270.00				
Select One of the Module (E	Select One of the Module (Electives (IGE) from the List Below:							
Leadership <b>OR</b>	LDSH101	5	8	R2140.00				
Constitutional Law & Human Rights	CLHR101							
Total				R20640.00				
Semester Two								
Analytical Chemistry III: Chromatography	ACCH301	6	12	R5270.00				
Analytical Chemistry III: Atomic Spectroscopy	ACAS301	6	12	R5270.00				
Analytical Chemistry III: Molecular Spectroscopy	ACMS301	6	12	R5270.00				
Analytical Chemistry III: Electroanalytical Chemistry	ACEC301	6	12	R5270.00				
Chemical Quality Assurance	CQLA101	6	16	R4610.00				
Total	R25690.00							
TOTAL CREDITS SEMEST								
Third Year Curriculum								
Semester One								
Experiential Learning, I	EXLNI0I	6	12	R2640.00				
Chemistry Project I	CHPI101	6	36	R3950.00				
Community Engagement and Development	ASCE101	6	12	R3410.00				
Total				R10000.00				
Semester Two								
Experiential Learning II	EXLN201	6	48	R3290.00				
Chemistry Project II	CHPJ201	6	12	R2640.00				
Total	R5930.00							
TOTAL CREDITS SEMEST								

### **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 (C.A.O)
Private Bag X06
Dalbridge
4014

Tel: (031) 2684444 Fax: (031) 2684422

#### OR

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

CAO Code: DUDCH3

Closing Date for applications: 30 September 2022

#### For Further Information

Contact the Department of Chemistry: Steve Biko Campus (\$10, Level 3) Durban University of Technology P O Box 1334 DURBAN 4000

Tel: (031) 373 2300 Fax to email: 08667406058 Email: karenf@dut.ac.za

# Financial Aid

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

For an explanation on how to fill out the application form, please go towww.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.

This is for information purposes only and is not binding on the Durban University of Technology