

DIPLOMA IN ANALYTICAL CHEMISTRY







01 JAN - 31DEC 2024

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: http://www.sacnasp.org.za/about-us/voluntary-associations.html

Explanation of Points scale:

SENIOR CERTIFICATE (SC)					
SYMBOL	HIGHER GRADE STANDARD GRADE				
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			

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 Diploma:

"a National Senior Certificate (NSC) as certified by the Council for General and Further Education and Training (Umalusi), with a minimum of achievement rating of 3 for English and a minimum achievement rating of 3 in four recognised NSC 20-credit subjects."

Entry Requirements (Diploma in Analytical Chemistry)

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NATIONAL SENIOR CERTIFICATE (NSC) (01 January 2009)		SENIOR CERTIFICATE (SC) (PRE 2009)		C)	NATIONAL CERTIFICATE VOCATIONAL (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%
In addition: TWO recognized NSC 20 credit subject as per G7 rule (As stated above)	3					

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 **2023** 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 2024 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	GINC101	5	16	R7570.00		

Mathematics MTHCI0I 5 16 R4820.00					
Physics PhilCi01 S 16 R4820.00	Chemistry				
Computer Skills CPUS101 S R340.00	Mathematics I	MTHCI0I	5	16	R4820.00
Computer Skills1	Physics I	PHIC101	5	16	R4820.00
Semester Two	Cornerstone 101	CSTN101	5	12	R3580.00
Semester Two	Computer Skills I	CPUSI0I	5	8	R3440.00
Semester Two Organic and Physical OPCH101 S 16 R7570.00 Chemistry ANCH101 6 20 R8940.00 Communication Skills CCNS101 5 8 R3440.00 Select Two of the Module (Electives (IGE) from the List Below: Introduction to ITCH101 S 8 R2070.00 R2230.00 Cultural Diversity OR R2230.00 Sustainable Earth Studies SERS101 R2240.00 R2380.00 Sustainable Earth Studies SERS101 R2240.00					R24230.00
Organic and Physical OPCHI01 S 16 R7570.00					112 120 1100
Chemistry		OPCHINI	ζ	16	R7570 00
Analytical Chemistry ANCHIOI 6 20 R8940.00		OI CITIOI		10	107570.00
Communication Skills		ANCHI0I	6	20	R8940.00
Select Two of the Module (Electives (IGE) from the List Below: Introduction to ITCHIOI S		CCNSIOI	5	8	R3440 00
Introduction to TCHI0 5					10.000
Technopreneurship OR Cultural Diversity OR Cultu				Ω	R2070 00
Cultural Diversity OR		11011101	3	0	1\2070.00
Values in the Workplace OR VWKP101		CLDVIOL			R2230.00
Sustainable Earth Studies		1			
Total TOTAL CREDITS SEMESTER 1&2 128	-				
Second Year Curriculum Second Year Year Year Year Year Year Year Year		35101			
Semester One		TED 102		100	K28870.00
Semester One Analytical Chemistry ANCH20	TOTAL CREDITS SEMES			128	
Analytical Chemistry II		Second Yo	ear Curriculum		
Applied Inorganic Chemistry	Semester One				
Applied Organic Chemistry	Analytical Chemistry II	ANCH201	6	24	R2810.00
Applied Organic Chemistry		APIC101	6	12	R5500.00
Applied Physical Chemistry		APOCI0I	6	12	R5500.00
Select One of the Module (Electives (IGE) from the List Below: Leadership OR			6	12	
Leadership OR		lectives (IGE) from the List	t Below:		
Constitutional Law & Human Rights Total R21540.00				8	R2230.00
Total R21540.00		I .			
Semester Two					
Analytical Chemistry III:					R21540.00
Chromatography					
Analytical Chemistry III: ACAS301 6 12 R5500.00 Atomic Spectroscopy Analytical Chemistry III: ACMS301 6 12 R5500.00 Analytical Chemistry III: ACEC301 6 12 R5500.00 Electroanalytical Chemistry III: ACEC301 6 16 R4820.00 Electroanalytical Chemistry Total R26820.00 Total		ACCH301	6	12	R5500.00
Atomic Spectroscopy		A C A C 20 L		12	DEFO0.00
Analytical Chemistry III: Molecular Spectroscopy Analytical Chemistry III: ACEC301 6 12 R5500.00 Analytical Chemistry III: Electroanalytical Chemistry Chemical Quality Assurance CQLA101 6 16 R4820.00 Total R26820.00 TOTAL CREDITS SEMESTER 1&2 132 Third Year Curriculum Semester One Experiential Learning, I EXLN101 6 12 R2750.00 Chemistry Project I CHPJ101 6 36 R4130.00 Community Engagement and Development ASCE101 6 12 R3570.00 Semester Two Experiential Learning II EXLN201 6 48 R3290.00 Chemistry Project II CHPJ201 6 12 R2640.00 Total R5930.00		ACAS301	6	12	R5500.00
Molecular Spectroscopy	Analytical Chemistry III:	ACMS301	6	12	R 5500 00
Analytical Chemistry III: Electroanalytical Chemistry Chemical Quality Assurance CQLA101 Total TOTAL CREDITS SEMESTER 1&2 Third Year Curriculum Semester One Experiential Learning, I Community Engagement and Development Total Total EXLN101 Chemistry Project I CHPJ101 Community Engagement and Development Experiential Learning II CHPJ01 EXLN201 EXLN201	Molecular Spectroscopy	ACI 13301		12	13300.00
Chemical Quality Assurance CQLA101 6	Analytical Chemistry III:	ACEC301	6	12	R5500.00
Total					
TOTAL CREDITS SEMESTER 1&2 132		CQLA101	6	16	
Third Year Curriculum					R26820.00
Experiential Learning, I EXLN101 6 12 R2750.00	TOTAL CREDITS SEMEST			132	
Experiential Learning, EXLN10 6 12 R2750.00					
Chemistry Project CHPJ101 6 36 R4130.00					
Community Engagement and Development ASCE101 6 12 R3570.00			6	12	R2750.00
Development R10450.00		CHPJ101	6	36	R4130.00
Total R10450.00 Semester Two Experiential Learning II EXLN201 6 48 R3290.00 Chemistry Project II CHPJ201 6 12 R2640.00 Total R5930.00	Community Engagement and		6	12	R3570.00
Semester Two Experiential Learning II EXLN20I 6 48 R3290.00 Chemistry Project II CHPJ20I 6 12 R2640.00 Total R5930.00					
Experiential Learning II EXLN201 6 48 R3290.00 Chemistry Project II CHPJ201 6 12 R2640.00 Total R5930.00	Total				R10450.00
Chemistry Project II CHPJ201 6 12 R2640.00 Total R5930.00					
Total R5930.00					
		CHPJ201	6	12	
TOTAL CREDITS SEMESTER 1.22		R5930.00			
TOTAL CILLDITS SEPTEM 192	TOTAL CREDITS SEMEST	TER 1&2		120	

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

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

CAO Code: DUDCH3

Closing Date for applications: 30 September 2023

For Further Information

Contact the Department of Chemistry: Steve Biko Campus (S10, Level 3) Durban University of Technology P O Box 1334 DURBAN 4000

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

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.

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