

SCHOOL OF ENGINEERING

PROGRAMME TITLE	SAQA ID	NQF LEVEL	CREDITS
Diploma: Industrial Chemistry	21141	6	240

DESCRIPTION

During the course of your studies you will be equipped with the knowledge of Communication, Industrial Chemical Operations, Inorganic Chemistry, Instrumentation, Management 1, Organic Chemistry, Qualitative and Quantitative Chemistry, and Specialist Chemical Analysis.

CAREER FIELDS/FURTHER STUDIES

Successful students will have a basis for further learning to engage in more advanced industrial chemistry environments and also to work effectively in this field. Please enquire at your nearest INTEC College branch for the prospectus containing information with regard to further studies.

PROGRAMME OUTLINE

1st Year

Communication

- Communication Theory
- Written communication
- Oral and Graphic Communication Techniques

Mathematics

- Equations
- Manipulation and word problems
- Determinants
- Complex numbers
- Trigonometry
- Sketch graphs
- Limits and Differentiation
- Integration

Qualitative Analysis

- Qualitative Analysis

Management 1

- Principles of Business Management – The Formations and locations of a Business
- Management Principles – Problem Solving and Decision-making
- Management Principles – The Process of Management
- Management Principles – Planning
- Management Principles – Organizing
- Management Principles – Leading
- Management- Motivating and Ethical Conduct in a Business Environment
- Management-Control

Quantitative Analysis

- Quantitative Analysis

Organic Chemistry

- Organic Chemistry

2nd Year

Inorganic Chemistry

- Inorganic Chemistry

Industrial Chemical Operations

- Size Reduction
- Size Separation
- Filtration
- Evaporation and Crystallisation
- Heat Transfer
- Distillation
- Drying
- Mixing
- Purification

Specialist Chemical Analysis

- Purification
- Purification of Water
- Instrumental Lab Analysis

Instrumentation

- Process Press Measurement and Control Instrument
- Process Press Measurement
- Temperature Measurement and control Instrument
- Principles of Auto Process Control I
- Fluid Flow Measurement
- Liquid Level Measurement and Control
- Liquid Level Measuring

TYPE OF PROGRAMME

Diploma: Industrial Chemistry (SAQA ID 21141) is a National Qualification.

DURATION

You should be able to complete this course within 24 months.

ADMISSION REQUIREMENTS

Grade 12 (Std. 10) or equivalent, or the INTEC Chemical Laboratory Assistant Certificate, or minimum 3 years relevant work experience.

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LEARNING MATERIAL AND TEXTBOOKS

Quality learning materials designed specifically for distance study are provided to you via the College's Online Study Portal which you may access at www.intec.edu.za. Please note that all textbooks and/or kit items are for your own account.

Prescribed Textbooks (All textbooks are subject to change)		
Item Number	Title	ISBN Number
I10055704-E1	Mathematics N4 Textbook	9781919780412

PRICING

Enquire at your nearest INTEC College branch for a current programme pricelist.

ADDITIONAL COSTS

Registration/course fees do not include (where applicable) membership costs with professional bodies and/or exam costs (internal and/or external).

ASSESSMENT OUTLINE

Assessment is the process of gathering information using various methods to gauge the effectiveness of the teaching and learning process in a systematic way. When you submit your assessments, a qualified subject matter expert evaluates your performance against the teaching and learning segments.

In order to accommodate your needs as a distance learner, we have included the teaching element in your learning material. In addition to this, you have access to a tutor, who is available through our DAT query support system, as you work through your learning material.

Your assessment process will include formative assessments that may include a combination of the following:

- self-assessments;
- peer assessments;
- assignments; and
- tests.

Summative assessments could include either or a combination of:

- a written exam; or
- a Portfolio of Evidence (PoE). A PoE will consist of a combination of various required documents including your completed, signed-off assessments.

The College retains your Portfolio of Evidence for verification purposes by the relevant Quality Assurance bodies. Upon successful completion of your studies, you will obtain your Award.

Your Orientation Guide reflects the Assessment Policies and Procedures of the College.

Please note: Depending on your choice of Study Programme, you may write your examinations at an external venue. If your examination is held at an external venue, you need to follow the application process requirements.

All students are encouraged to work on all the assignments that are in the study guide. However, students are required to submit compulsory assignments that are provided in the Study Programme. Only these compulsory assignments will be marked and accounted for to be included in the final mark.

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Subject Name	Formative assessment	Summative assessment	Portfolio
Communication	2	1	Yes
Mathematics	4	1	Yes
Qualitative analysis	3	1	Yes
Management 1	2	1	Yes
Quantitative analysis	4	1	Yes
Organic chemistry	2	1	Yes
Inorganic chemistry	3	1	Yes
Industrial chemical operations	6	1	Yes
Specialist chemical analysis	4	1	Yes
Instrumentation	8	1	Yes

CERTIFICATION

Upon successful completion of the programme, you will receive a Diploma: Industrial Chemistry.

COLLEGE ACCREDITATION AND REGISTRATION

INTEC College (Pty) Ltd is provisionally registered as a Private College with the Department of Higher Education and Training under the Continuing Education and Training Act No. 16 of 2006. Registration Number: 2008/FE07/025. INTEC College (Pty) Ltd is provisionally accredited by Umalusi, the Quality Council for General and Further Education and Training. Accreditation number: 18 FET02 00135 PA. INTEC College (Pty) Ltd is further accredited by the Quality Council for Trades and Occupations (QCTO) Accreditation number: 13/0006.

Disclaimer

The information contained in this fact sheet is accurate at the time of printing. However, factors beyond INTEC College's control (such as environmental, regulatory, or technical changes) may cause the contents of this fact sheet or of the programme to change. In the event of any such change, INTEC College will attempt to formally notify current students. All possible measures will be taken to minimise inconvenience to students. All course requirements, including hardware and software requirements, should be acknowledged and adhered to, as per the course brochure. INTEC College reserves the right to change kit items without prior notification.

Please note that you have to complete this qualification by 2022, subject to the conditions applying to the duration of the course. You are therefore advised to pace your studies accordingly.

STUDENT ACKNOWLEDGEMENT

I,, hereby acknowledge that I understand the information stated in this document and fully comprehend the specifics explained above and below pertaining to this course. I understand that the programme I am enrolling for is a/an:

- National Qualification
 Agent Programme
 INTEC Programme **Student's Initials**

The value and status of the course type is explained in the course brochure, which I have read.

Name of student: Signature:

Name of legal guardian: Signature:
(if applicable)

Name of student consultant: Signature

Date:

* Please note the original signed copy should be kept on the student's record file.