

## ADVANCED DIPLOMA IN GEOLOGY

AdvDip (Geology) - NQF Level 7 (120 credits)

Qualification code: ADGE21

SAQA ID: 113013, CHE NUMBER: H/H16/E074CAN

Campus where offered: Arcadia Campus

### REMARKS

- a. *Admission requirement(s):*  
A National Diploma: Geology, or a Diploma in Geology or a relevant bachelor's degree, or an equivalent qualification at NQF Level 6 with a minimum of 360 credits.
- Holders of any other equivalent South African or international qualification may also be considered, see Chapter 1 of Students' Rules and Regulations.
- b. *Selection criteria:*  
Admission is subject to selection. Prospective students will be evaluated based on the marks obtained in the previous qualification and/or work experience.
- Acceptance is subject to available capacity according to the Student Enrolment Plan (SEP). Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, [www.tut.ac.za](http://www.tut.ac.za).
- c. *Recognition of Prior Learning (RPL), equivalence and status:*  
See Chapter 30 of Students' Rules and Regulations.
- d. *Intake for the qualification:*  
January only.
- e. *Presentation:*  
Day classes.
- f. *Minimum duration:*  
A minimum of one year or two years, depending on the programme offering.
- g. *Exclusion and readmission:*  
See Chapter 2 of Students' Rules and Regulations.

### CURRICULUM

#### FIRST YEAR

CODE	MODULE	NQF-L	CREDIT
ENG107V	Engineering Geology IV	(7)	(25)
GEP107V	Geophysics IV	(7)	(25)
HYG107V	Hydrogeology IV	(7)	(25)
MEG107V	Mining and Exploration Geology IV	(7)	(25)
RGE107V	Research Methodology	(7)	(20)
TOTAL CREDITS FOR THE QUALIFICATION:			120

## MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. At time of publication, the syllabus content was defined as follows:

### E

#### **ENGINEERING GEOLOGY IV (ENG107V)**

**1 X 3-HOUR PAPER**

*(Module custodian: Department of Environmental, Water and Earth Sciences)*

Geology and Civil Engineering. Upon successful completion of the module, the student should be able to: determine the scope of an engineering geology project and the ground investigation that needs to be carried out. (Total notional time: 250 hours)

### G

#### **GEOPHYSICS IV (GEP107V)**

**1 X 3-HOUR PAPER**

*(Module custodian: Department of Environmental, Water and Earth Sciences)*

Geophysical properties of rocks such as resistivity, magnetics, gravity, seismics and induced polarisation useful for hydrological exploration and mineral exploration. Upon completion, the student should be able to use geophysics principles to explore for mineral resources and ground water, conduct on site geophysical programs as a geotechnician. (Total notional time: 250 hours)

### H

#### **HYDROGEOLOGY IV (HYG107V)**

**1 X 3-HOUR PAPER**

*(Module custodian: Department of Environmental, Water and Earth Sciences)*

Occurrence of groundwater, how it moves and what influences its quality. Upon completion, the student should be able to: explore for groundwater resources, determine its suitability for different applications and determine the rate at which it is moving. (Total notional time: 250 hours)

### M

#### **MINING AND EXPLORATION GEOLOGY IV (MEG107V)**

**1 X 3-HOUR PAPER**

*(Module custodian: Department of Environmental, Water and Earth Sciences)*

Mineral exploration, mineral resource drilling and mining methods to extract ore deposits. Upon completion, the student should be able to: explore for mineral resources, conduct on site mineral drilling programs and carryout geotechnical duties at a producing mine. (Total notional time: 250 hours)

### R

#### **RESEARCH METHODOLOGY (RGE107V)**

**CONTINUOUS ASSESSMENT**

*(Module custodian: Department of Environmental, Water and Earth Sciences)*

A student is prepared to work effectively in a scientific environment and apply the key terms, rules, theories and techniques of research in the field of geology science. Upon completion, the student will be able to recognise and use the major tools used for research and writing skills. In addition, the student will demonstrate his/her writing skills, team working ability and presentation skills. (Total notional time: 200 hours)

