

BACCALAUREUS TECHNOLOGIAE: ENVIRONMENTAL SCIENCES

Qualification code: BTEV02 - NQF Level 7

Campus where offered: Arcadia Campus

Important notification to new applicants:

Students who intend to enrol for this qualification should take note that no new applications will be accepted as from 2020. Potential students are advised to consult the University's website for possible new qualifications which are aligned with the newly-implemented Higher Education Qualification Sub-Framework.

REMARKS

- a. *Admission requirement(s):*
A National Diploma: Environmental Sciences or an NQF Level 6 bachelor's degree in Environmental Sciences from a South African university.

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:*
Selection is based on an assessment by a departmental selection panel.
- c. *Minimum duration:*
One year.
- d. *Presentation:*
Block-mode classes. This qualification is presented as a package. The Department reserves the right to limit or alter the selection and clustering of subjects; for example, in the case of uneconomical class groups.
- e. *Intake for the qualification:*
January only.
- f. *Exclusion and readmission:*
See Chapter 2 of Students' Rules and Regulations.
- g. *Recognition of Prior Learning (RPL), equivalence and status:*
See Chapter 30 of Students' Rules and Regulations.
- h. *Re-registration:*
A student must register for the project within the above time and will be allowed to re-register for it only once.
- i. *Subject credits:*
Subject credits are shown in brackets after each subject.

CURRICULUM

YEAR SUBJECTS

CODE	SUBJECT	CREDIT	PREREQUISITE SUBJECT(S)
PJN410T	Project: Environmental Technology IV	(0,200)	
PJN410R	Project: Environmental Technology IV (re-registration)	(0,000)	
plus four of the following subjects:			
EMG400T	Environmental Management IV	(0,200)	Environmental Management III



ENC400T	Environmental Chemistry IV	(0,200)	Environmental Chemistry III
ENV400T	Environmental Geohydrology IV	(0,200)	
ERE400T	Environmental Rehabilitation IV	(0,200)	
ERS410T	Environmental Resources IV	(0,200)	
GTH400T	Geotechnology IV	(0,200)	
IMA401T	Integrated Catchment Management IV (second-semester subject)	(0,200)	
WQM411T	Water Quality Management IV (first-semester subject)	(0,200)	
TOTAL CREDITS FOR THE QUALIFICATION:		1,000	

SUBJECT 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 subject. On 01 August 2018, the syllabus content was defined as follows:

E

ENVIRONMENTAL CHEMISTRY IV (ENC400T) **1 X 3-HOUR PAPER**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 Green chemistry. Environmentally friendly syntheses. Alternative chemical processes. (Total tuition time: ± 36 hours)

ENVIRONMENTAL GEOHYDROLOGY IV (ENV400T) **1 X 3-HOUR PAPER**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 Groundwater modelling. Management of groundwater problems. (Total tuition time: ± 48 hours)

ENVIRONMENTAL MANAGEMENT IV (EMG400T) **1 X 3-HOUR PAPER**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 Environmental impact study. Sustainable development. Environmental accounting. Life cycle assessment. (Total tuition time: ± 32 hours)

ENVIRONMENTAL REHABILITATION IV (ERE400T) **1 X 3-HOUR PAPER**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 General overview of resources in the mining sector. The impact of the activities on the environment. Rehabilitation methods. (Total tuition time: ± 45 hours)

ENVIRONMENTAL RESOURCES IV (ERS410T) **1 X 3-HOUR PAPER**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 Industrial ecology. Protected areas. Waste management. Risk management. (Total tuition time: ± 45 hours)

G

GEOTECHNOLOGY IV (GTH400T) **CONTINUOUS ASSESSMENT**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 Project and report. (Total tuition time: not available)

I

INTEGRATED CATCHMENT MANAGEMENT IV (IMA401T) **1 X 3-HOUR PAPER**
(Subject custodian: Department of Environmental, Water and Earth Sciences)
 Diffuse pollution. Catchment management studies. Institutional arrangements. Mining waste management. (Total tuition time: ± 24 hours)



P

PROJECT: ENVIRONMENTAL TECHNOLOGY IV (PJN410T/R)

PROJECT ASSESSMENT

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

Research methodology. Students plan and implement an applied environmental project. A final report has to be submitted. (Total tuition time: not available)

W

WATER QUALITY MANAGEMENT IV (WQM411T)

1 X 3-HOUR PAPER

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

Policies and guidelines. Resource-directed measures. Source-directed measures. Waste treatment technologies. (Total tuition time: ± 24 hours)

