

Career Profile: Environmental Officer

Mining by its very nature disrupts the environment. An environmental officer plays a huge role in helping to achieve a balance between this disruption and the protection of the environment. The environmental officer on a mine implements an environmental management system and also carries out environmental impact assessments to monitor the impact of mining activities and take corrective steps when necessary. S/he has to ensure legal compliance as well as compliance with the mining group's environmental policies and commitments.

The growing awareness of the fragility of the environment and accompanying critical watchfulness of many communities contribute to increased pressure on these officers to communicate with the community and listen to the concerns they express.

Education Requirements

National Senior Certificate (NSC)

For a career in mining students are advised to select Science and Mathematics and to add to this a selection from the designated subjects. These are subjects that are particularly suitable for tertiary study.

Bachelor Degree

Bachelor of Science (3 years) Bachelor of Commerce (Environmental Management) (3 years)

Bachelor of Science Engineering (Environment) - (4 years)

There are a variety of degrees that deal with environmental management.

Offered at:

- [North-West University](http://www.uniwest.ac.za/faculties/ast/department.html)¹ (School of Environmental and Health Sciences)
- [University of Johannesburg](http://www.uj.ac.za/geography/CoursesDegrees/tabid/1041/Default.aspx)² (Department of Geography, Environmental Management & Energy Studies)
- [University of Venda](http://www.univen.ac.za/environmental_sciences/index.html)³ (School of Environmental Sciences)
- [University of the Witwatersrand](http://web.wits.ac.za/Academic/EBE/CEE/)⁴ (School of Civil and Environmental Engineering)
- [UNISA](http://brochure.unisa.ac.za/brochure/showprev.aspx?d=1_5_2&f=p_-2089ENC)⁵ (College of Agriculture and Environmental Sciences)

¹ <http://www.uniwest.ac.za/faculties/ast/department.html>

² <http://www.uj.ac.za/geography/CoursesDegrees/tabid/1041/Default.aspx>

³ http://www.univen.ac.za/environmental_sciences/index.html

⁴ <http://web.wits.ac.za/Academic/EBE/CEE/>

⁵ http://brochure.unisa.ac.za/brochure/showprev.aspx?d=1_5_2&f=p_-2089ENC

North-West University

BCom (Environmental Management) (3 years)

University of Johannesburg

BSc Geography with environmental management (3 years)

University of Venda

BES MEG (Bachelor of Earth Sciences in Mining and Environmental Geology) (3 years)

University of the Witwatersrand

BS Engineering (Environment) (4years)

UNISA

BSc with specialisation in environmental management (chemistry stream) (3 years)

National Diploma / BTech

Students who prefer a more practical approach can enrol for programmes to qualify in retailing at BTechnology and Diploma levels. Specializations are offered in these programmes.

The National Diploma is a three year course which includes guided practical experience. The diploma is a pre-requisite for admission to a Bachelor of Technology - BTech.

Offered at:

- [Tshwane University of Technology](http://www.tut.ac.za/Students/facultiesdepartments/science/departments/environscience/Pages/default.aspx)⁶ (Department of Environmental, Water and Earth Sciences)
- [UNISA](http://brochure.unisa.ac.za/brochure/showprev.aspx?d=l_5_2&f=p_-2089ENC)⁷ (College of Agriculture and Environmental Sciences)

Specializations offered:

There are some National Diplomas and BTech degrees to consider.

UNISA

National Diploma: Civil engineering

BTech: Engineering (civil) with specialisation in environmental engineering

Tshwane University of Technology

National Diploma: Environmental sciences

BTech: Environmental sciences

⁶ <http://www.tut.ac.za/Students/facultiesdepartments/science/departments/environscience/Pages/default.aspx>

⁷ http://brochure.unisa.ac.za/brochure/showprev.aspx?d=l_5_2&f=p_-2089ENC

Admission requirements

As admission requirements vary from one institution to another, find out what the specific requirements are by checking on the website and contacting the university if you have any queries.

Possible Employers

- [Anglo American Corporation Limited](#)⁸
- [AngloGold Ashanti](#)⁹
- [Anglo Platinum](#)¹⁰
- [BHP Billiton](#)¹¹
- [De Beers Consolidated Mines](#)¹²
- [Durban Roodepoort Deep](#)¹³
- [Gold Fields Limited](#)¹⁴
- [Harmony Gold](#)¹⁵
- [Impala Platinum Limited](#)¹⁶
- [Ingwe Coal Corporation Ltd](#)¹⁷

Find out more

Find out more about mining and its impact on the environment:

- [Article](#)¹⁸ on platinum mining's efforts to protect the environment.
- Environmental threat to the Wild Coast from [titanium mining](#)¹⁹.
- [Example](#)²⁰ of rehabilitation done in conjunction with the local community.
- [Newsletter](#)²¹ that deals with Sustainable Development through Mining (SDM) and rehabilitation of abandoned mines.

⁸ <http://www.angloamerican.co.uk/>

⁹ <http://www.anglogold.com/default.htm>

¹⁰ <http://www.angloplatinum.com/>

¹¹ <http://www.bhpbilliton.co.za/bb/home.jsp>

¹² <http://www.debeersgroup.com/Inside-De-Beers/Family-of-Companies/De-Beers-Consolidated-Mines/>

¹³ <http://www.drd.co.za/>

¹⁴ <http://www.goldfields.co.za/>

¹⁵ <http://www.harmony.co.za/>

¹⁶ <http://www.implats.co.za/business/impala.asp>

¹⁷ <http://www.mbendi.com/orgs/cb23.htm>

¹⁸ <http://www.busrep.co.za/index.php?fSectionId=560&fArticleId=3950074>

¹⁹ <http://www.swc.org.za/pondoland%E2%80%99s-long-walk-for-freedom.htm>

²⁰ <http://www.debswana.com/Debswana.Web/General/News+Archive/Orapa+Mine+rehabilitates+Mopipi+dam.htm>

²¹ http://www.sdmining.co.za/files/SDMnewsletter_Oct.pdf

Are you suited to this career?

This quick quiz can help you to identify whether you are suited for this occupation.

Quiz	Yes	No
Are you interested in nature?		
Are you concerned about the damage industry can do to the environment?		
Are you well organized and do you work in a systematic way?		
Are you a person who has strong convictions which you can communicate to others in a persuasive way?		
Are you a keen observer?		
Do you have an enquiring mind and enjoy solving problems?		
Are you interested in an occupation in which you spend a fair amount of time working out of doors?		
Would you describe yourself as persevering and can you stick to a task until it is completed?		
Are you able to work well with others?		
Can you express yourself well orally and in writing?		

If you have mainly yes answers it may be an indication that this is an occupation to consider.