

# Environmental careers@ Unisa

Prepare for opportunities



Learn without limits.



# Why environmental careers?

There has been an increased interest in environmental issues in the past few years with many individuals becoming more concerned about how we are ensuring sustainable environmental practices so that our planet and its resources could be preserved for future generations.

## How to use this brochure

Before you embark on your studies in environmental management, we would encourage you to reflect on the career choice you are making and the activities and information in this brochure will help you to do so. Remember that your career journey does not end when you make your decision what to study, but that you will be required to make constant choices related to your career throughout your life. It is our intention that you will use the information in this brochure to revise your career plans as you continue on your journey.

This is an interactive document, meaning that you could save this document on your computer, type in answers to the questions and save it for future reference. After you have completed the activities in this brochure, you could also forward this document to other people, for example, a mentor or career counsellor to have further conversations about your career.



# Why environmental careers?



Why are you interested in a environmental studies?

Where does your interest come from?

# Is this for me?



The following questions will help you to think about your interest in an environmental career. Your honesty when completing the questions will help you to have a realistic picture of your interest.

Answer “yes” or “no” to the following statements.

Nr	Statement	YES	NO
1	I enjoy learning about places.		
2	I like to see places and features on maps.		
3	I choose the window seat when I travel in taxis, cars, buses, trains, etc so that I can observe things on my journey.		
4	I am interested to hear news about what happens in other countries.		
5	I like to work outside, away from an office.		
6	I am interested in finding ways to solve problems.		
7	I enjoy asking questions about the world in which I live.		
8	I like to see how different things connect with each other.		
9	I enjoy collecting and analysing information about the world in which I live.		
10	I like to see the “big picture” showing people and places are interconnected.		
11	I am concerned about a declining environment.		



# Is this for me?

Nr	Statement	YES	NO
12	I find it interesting to know how people can reduce their impact on the environment.		

You answered “yes” to:

10-12 statements: You have a bright future in the environment!

7-9 statements: Good – you should consider a career in environmental issues.

There is lots that interest you.

5-8 statements: You show a great deal of interest in following an environmental career. Re-look at where you have answered “no” and examine careers that relate more directly to these statements

3-5 statements: You seem to show a low interest in the environment and should think about another careers, or find out more information about what an environmental career entails.

1-2 statements: Hmm, perhaps you need to think about some other career possibilities, or find out more information about what an environmental career entails.

Source:

Society of South African Geographers (<http://www.ssag.co.za/education/careers.php>)

# My career planning



The following questions will help you to think about important aspects regarding planning your environmental career. Your honesty when completing the questions will help you to have a realistic picture of what you could still possibly do to make effective career decisions

Answer “yes” or “no” to the following statements.

Nr	Statement	YES	NO
1	I am sure that I want to major in this field.		
2	I want a career that is related to the environment.		
3	I am familiar with the types of jobs that environmental management/ science graduates can apply for.		
4	I am aware of the skills that employers expect.		
5	I know about the different fields in environmental management/ science		
6	I know which field in environmental management/ science I am interested in		
7	I have a clear understanding of the kinds of work done by individuals in this field.		
8	I know where to look for information about a career related to environmental issues.		
9	I have spoken to someone who works in the environmental science/ management field.		
10	I know what steps I will have to take to accomplish my career goals in this field.		



# Is this for me?

Nr	Statement	YES	NO
11	I know what type of qualification I need for the field I am interested in.		
12	I understand the curriculum requirements for my intended qualification.		
13	I know about other study options after completing my first degree.		
14	I enjoy reading about environmental topics.		
15	I am aware of the experience that employers expect.		
16	I know what the admission requirements are for postgraduate studies in this field.		

You answered “yes” to:

12-16 statements: It seems as if you thought about and completed research about your environmental careers. Pay attention to those items you answered “no” to.

8-11 statements: It seems as if you still have some thinking and further research to do before you decide to continue in this field. Pay careful attention to those items you answered “no” to.

0-7 statements: Consider carefully whether you are ready to make a decision about your career. We recommend that you pay careful attention to the items you answered “no” to and to see a counsellor if you feel unsure of how to proceed. Contact details are on the last page of this brochure.



# Your career choice

Making a career choice is not something that happens only once: over the course of your life, you will make many career choices. These career choices need to close the gap between where you are and where you want to be. Your career choices are shaped by what employers and/or clients want and by changes that impact globally. Employers seek transferable work related skills that make you adaptable in the fast-changing workplace: skills such as working with others effectively, self management, and thinking and reasoning skills. The [Institute for the Future](#) has identified a number of disruptors (drivers for change) that affect your work, such as needing to work past 65 to ensure resources, the rise of smart technology, the internet, and organisations functioning outside traditional organisational boundaries, enabled by social technologies.

We want you to make career choices that contribute to your graduateness – career choices to help you adapt to a changing environment. Your graduateness is linked to

- your ability to find and maintain employment continuously (referred to as employability)
- your ability to learn skills required for specific fields
- personal attributes (especially positive beliefs about yourself and what you can contribute)
- your ability to reflect on what you are doing and how you are doing it
- knowing where you are going and how to get there

As you progress with your qualification you will acquire knowledge, skills, competencies and values that will change your life. Take time to reflect on how this impacts on your work, your relationships and your community. The following six activities will help you to think about the various ingredients necessary to make an effective career choice.



## My future

Your career vision is your picture of what you want from life or where you see yourself in the future. As you are thinking about studying, you have hopes that represent a picture of what you want from life or where you see yourself in the future. Think about your situation at the moment (eg you are a school leaver, unemployed, employed, a graduate or retrenched).

Where are you now?

Where do you want to be?

I want to be a \_\_\_\_\_ because \_\_\_\_\_

I want to contribute \_\_\_\_\_  
(write down how you would want to help others)

I want to achieve \_\_\_\_\_  
(write down what you want for yourself)

## My planning

The future holds no guarantees and planning prepares you to some degree to be able to adapt to changes. How do you plan for uncertainty? One of the ways you could plan for uncertainty, is to know where you are going. It is not certain how and when you will arrive and it is also possible that your destination will change. Having a sense of where you want to be, creates a degree of certainty and a sense of being in control when things are uncertain.



# Your career choice

Think about how to make your hopes for the future real. What practical things must you do to realise it? (for example, find out more about qualification; talk to people in my chosen field).

What else could you be? Have you thought about other career options where you could utilise your unique strengths?

How else could you use the qualification you're interested in?

What will happen if you can't achieve your plan due to unforeseen circumstances? What if you can't become what you want to?

What information do you still need to help you plan what you need to do? Who can you talk to?



# Your career choice

## My skills

Skills are abilities you've developed and can use effectively. You learn skills from your experiences (eg voluntary, paid or unpaid work, and family and community responsibilities).

Basic skills are important when working within a fast-changing society:

- communication skills (reading, writing, creating online content, communicating visually & evaluating information)
- social intelligence (connecting meaningfully with others and wanting to make a difference)
- teamwork (negotiating, motivating and engaging with diverse groups online and offline)
- problem solving and novel thinking (creating unique solutions to problems)
- information management (filtering and making sense of information)

An international survey conducted by the Graduate Management Admission Council in 2014, found that communication skills (including oral communication, listening skills, written communication and presentation skills) is the skill mostly valued by employers. Other top 10 skills include adaptability, integrity, valuing the opinion of others, drive and cross-cultural sensitivity. You will learn new skills in each module of your qualification. These can help you become employed and improve your community contribution. You need to connect what you learn at university with what you can contribute in the workplace and in your community. As you study and your skills develop, your frame of reference will expand and you will become aware of more opportunities to apply the new skills you have developed.

It is important for you to find out what skills are needed for the type of opportunities you want to prepare for. The following website provides some guidelines for strategies to enhance your employability in specific environmental career fields: <http://bit.ly/1DSkU72>, <http://bit.ly/1DSI3HI> and <http://bit.ly/ZT4ADQ>.



# Your career choice

Think about your life experiences (work, volunteering, school, studies and personal) and then answer the following questions:

- What skills do I have?
- What skills do I need to develop related to the kind of opportunities I am hoping for?
- How will I develop these skills?

## My values

Your values show what is important to you. As such they have a significant effect on your career choices. Values are shaped by your family, community, work environment and life experiences. Some examples of values are: helping, honesty, status and knowledge.

List the values that are important to you and how you could link these values to specific occupations. How would your values be supported by the career choice you are making?  
How would your career choice support your values?

Use the O\*Net website (<http://bit.ly/1xuPrDY>) to identify job titles related to specific values.



# Your career choice

## My influences

Where do your career influences come from? Examples of influencers include school subjects, friends, family, colleagues, knowing yourself, the media (TV, movies, internet, radio), observing others at work and role models.

Make some notes about about how other people, events, and things have influenced you.

Chance events have a huge influence on careers. Think about the times when something happened that you did not plan for and could not control, but that impacted on your career direction, such as how you heard about Unisa or got your first job. Make some notes about how a chance event has influenced your career decisions.



# Your career choice

## My interests

What do you like doing? Write down at least three activities that you really enjoy (for example, reading books, gardening and playing soccer). Make some notes on how they relate to your interest in studying a qualification related to environmental issues. If you know what field you are interested in, how do these interests relate to a specific area in the broader field of environmental careers?



Make some notes about the following:

How do you feel about completing the career activities?

Write down at least two aspects that stood out for you?

What are you still curious about? How will you find out about this and when?



# Career options

The environment provides many exciting, interesting and satisfying career choices stretching across a tremendous range of fields and disciplines. Working in the environmental field is rewarding because you can contribute to the maintenance and conservation of essential life systems necessary for our human survival. There are two main routes which you can take:

- Social-environmental perspective
- Environmental science perspective

It is important to note that these two complement one another and effective environmental management combines both these perspectives.

## SOCIAL-ENVIRONMENTAL CAREERS

Career path	Related qualifications	Options at Unisa
Community conservation and rural development	BA degree with subjects such as Anthropology, Development Studies and Geography	BA Environmental Management BA General
Environmental education	Postgraduate Certificate in Education with subjects such as Geography and Biology; Formal Environmental Education courses pursued at postgraduate level	BA Environmental Management BA General followed by Postgraduate Certificate in Education
Environmental law	LLB degree with Environmental law as a subject	LLB degree LLM degree



# Career options

Career path	Related qualifications	Options at Unisa
Environmental journalism	Journalism degree or diploma	BA General degree with Languages, Linguistics and Geography BA Communication Science
Eco-tourism	Tourism degree or diploma	BCom degree with specialisation in Tourism NDip & BTech: Tourism Management
Cultural resources	BA degree with subjects such as Archaeology, Anthropology, Politics, Sociology and History	BA General

## ENVIRONMENTAL SCIENCE CAREERS

Environmental science careers start by completing a science degree or diploma. Subjects in the natural sciences such as Zoology, Botany and Ecology generally lead to a career path in biodiversity conservation, but may also lead to a career in environmental management. Subjects in the physical sciences such as Mathematics, Physics and Chemistry might lead to a career path in environmental management aspects such as pollution control or waste management. Landscape architects and civil engineers pursue environmental management through ensuring that environmental concerns are brought to bear on infrastructural development.

Career path	Related qualifications	Options at Unisa
Environmental impact assessment and environmental management	BSc degree in natural sciences with postgraduate courses in environmental management	BSc with specialisation in Life Sciences BSc with specialisation in Environmental Management



# Career options

<b>Career path</b>	<b>Related qualifications</b>	<b>Options at Unisa</b>
Horticulture	Horticulture diploma or degree	Diploma in Ornamental Horticulture BTech in Ornamental Horticulture
Nature conservation	Diploma in Nature Conservation or BSc degree with subjects such as Zoology, Botany, Ecology	Dip & BTech: Nature Conservation BSc with specialisation in Environmental Management BSc with specialisation in Life Sciences
Specialist scientists in biodiversity e.g. marine biologist, zoologist, ecologist	Postgraduate degrees in Zoology, Botany and Ecology, specialising in particular fields of interest	BSc degree with specialisation in Life Sciences
Waste managers and pollution controllers	BSc degree with subjects such as Mathematics, Physics, Chemistry, Climatology	BSc with specialisation in Environmental Management BSc with specialisation in Life Sciences
Environmental engineers	Civil Engineering degree or BTech degree in Civil Engineering	NDip & BTech: Engineering, Civil



# Environmental job titles

The following is a list of possible job titles related to an environmental career.

Biogeographer	Development Planner	Interpreter
Ecologist	Environmental Educator	Market Researcher
Cartographer	Environmental Impact Analyst	Meteorologist
Climatologist	Environmental Manager	Military Planner
Coastal Zone Manager	Environmental Planner	Natural Resource Manager
Lecturer	Foreign Service Officer	Regional Planner
Researcher	Geographic Information Specialist	Social Ecologist
Community Development facilitator	Geologist	Social Scientist
Conservation Officer	Geomorphologist	Soil Scientist
Conservationist	Hazardous Waste Planner	Teacher
Consultant	Health Services Planner	Tour Guide
Development Facilitator	Hydrologist	Transportation Planner
Delivery Manager	Land Use Planner	Travel Agent
Diplomat	Map Editor	Urban/City Planner
Earth Scientist Economic	Map Librarian	Water Resource Manager
	Map, Air Photo & Satellite Image	

## How can you learn more about these job titles?

- PACE Careers (<http://www.gostudy.net/occupations>)
- Career Planet (<http://www.careerplanet.co.za/>)
- Access a list of job titles linked to the green economy sector on O\*Net (<http://www.onetonline.org/find/career?c=11&g=Go>).
- Do a search on your favourite search engine for “environmental careers”.
- Search for “environmental careers” on Youtube to access videos related to this topic.



# Labour market research

Labour market information can help you when you search for work, plan your career or explore self-employment opportunities. It is essential information to have if you want to make informed career decisions and/or search for a job. It can tell you how industries and occupations are changing and whether they are growing or declining; what skills are needed; and the working conditions for specific jobs and industries.

There are many factors that influence the availability of jobs such as the impact of globalisation (local companies having to compete on the global market), an increasing awareness of sustainability issues and technology (use of computers and the availability of information electronically) on the international and national labour market. This means that you need to do continuous research as circumstances change constantly. Also, you will need to be creative in finding labour market information – all the information that you need is not stored in one place.

Before you get started with your research, you need to think about what you are collecting the information for. Is it for an immediate job search or for future career planning? What information do you need? Information about businesses in your area? Information about different occupations and jobs? Information about education and training opportunities? About salaries? About working conditions? About starting your own business?

## Where can I find information?

Possible sources of information could be family, friends, newspapers, the internet, companies, government (Department of Labour) and Sector Education and Training Authorities (SETAs).



# Labour market research

## Some online resources to help you get started

- Job search portals are useful in terms of researching labour market information. For example, you are interested in environmental careers, but you are not sure what kind of jobs are related, which qualifications are needed, or what the salary could be, use a job search portal to search for this information. Job search sites include: CareerWeb (<http://www.careerweb.co.za/>); PNet (<http://www.pnet.co.za/>); Careerjunction (<http://www.careerjunction.co.za/>) and Careers24 (<http://www.careers24.co.za/>).
- Use job search engines such as Indeed (<http://www.indeed.co.za>) and Careerjet (<http://www.careerjet.co.za>) to set up alerts related to environmental careers. You could then receive e-mails to inform you of jobs advertised related to your search.
- Follow news on <http://www.bizcommunity.com/GreenBiz> and create your own news feed to follow news related to your area of interest. Tools that can be used for this include: create alerts on Google search (<https://www.google.co.za/alerts>) or any RSS service such as Feedly (<https://feedly.com/>) and Digg (<http://digg.com/>)
- Ask a question on Quora (<http://www.quora.com/>).

## Informational interviewing

Informational interviews are designed to produce information and involves the process of spending time with one key industry network in a highly focused conversation. You could consider conducting several informational interviews to explore your career options and clarify goals; to expand your professional network; to build confidence in a non-threatening environment; to access up-to-date information and to identify personal strength and areas for development. Read more about this process and the types of questions you might want to ask on the Counselling & Career Development website at [http://bit.ly/my\\_employability](http://bit.ly/my_employability).



# Labour market research

## Other ways of doing labour market research

### Networking

Networking means developing a broad list of contacts - people you've met - and using them to your advantage when you look for a job or information about specific aspects. People in your network may be able to give you job leads, offer you advice and information about a particular company or industry, and introduce you to others so that you can expand your network.

#### Where do I start?

Your family, friends, and neighbors and their family, friends, and neighbors are obvious people to start with, but don't stop there. Also talk to fellow students, co-workers, colleagues in your industry, and those you meet at gatherings, such as discussion and tutorial classes, examinations, conferences, trade shows and conferences. Connect with others online through professional networks such as LinkedIn.



# Labour market research

## Some important points related to networking

- Reflect on your skills and areas of development and think about the type of industries and employers you want to work for and the type of jobs you are interested in.
- Always have an updated CV to be ready when opportunities present.
- Any relationship (including those with contacts in your network) is based on trust. Individuals in your network will not share information with you or recommend you to others if they do not trust you. An initial meeting or contact with someone does not establish a connection unless there is followup of some kind.
- Follow up with your network: how will you store information related to your network and how will you keep touch?

## Connect with others on LinkedIn

If you have not done so already, start building your network on LinkedIn (<http://www.linkedin.com>) today! Register for a free account and start connecting with your network online. Join groups relevant to your career field so that you could participate in discussions, ask questions and provide answers about specific topics and search for people, organisations and jobs in your field of interest and do research about companies, employees and opportunities.

## Volunteer

Your volunteer work links to your career vision and planning. Some questions to think about: Which organisations or community would benefit from my skills and knowledge? How would this organisation or community contribute to my career development? What conduct is expected of a professional in this organisation and in my future career? Identify volunteer opportunities in your area through conversations with members of your community. The GreaterGoodSA website at <http://www.myggsa.co.za/> will further help you to identify volunteer opportunities in your community that are related to your interests.



# Labour market research

## Internships/ Graduate Development programmes

Internships and graduate development programmes are valuable learning experiences where you could develop career-related skills and expand your professional network. Organisations may advertise these opportunities on their websites or on job search websites.

Use the following websites to search for internships or graduate development programmes:

- Prospectingbasics.com: [http://www.prospectingbasics.com/internship\\_programmes.html](http://www.prospectingbasics.com/internship_programmes.html)
- SAQA Career Help: <http://www.careerhelp.org.za/page/job-descriptions/lig-opportunities/1294164-Learnerships-Internships-and-Graduate-opportunities>
- Career Planet: <http://www.careerplanet.co.za/>
- Set up internship and graduate development programme related job alerts on the Indeed job search engine (<http://www.indeed.co.za>) and Careerjet (<http://www.careerjet.co.za>) to be alerted about opportunities.
- Search Google for these opportunities. Use search phrases such as “environment internships south africa” and “environment graduate development programme south africa”.



# What will I study?

Explore what environmental studies is by watching and listening to online lectures on a variety of topics.

## Some sites you could explore:

The Open University hosts online courses in a wide range of topics related to nature and the environment.

<http://www.open.edu/openlearn/nature-environment>

Coursera

<http://www.coursera.org>

EdX

<http://www.edx.org>

MITOpenCourseware

<http://ocw.mit.edu/courses/environment-courses/>

Open Culture

<http://www.openculture.com/freeonlinecourses>

iTunes university (on your iPhone or iPad)

<http://www.apple.com/education/itunes-u>

YouTube education

<http://www.youtube.com/education>



# My career learning plan

Your next step is to plan how you will get the information that you still need in order to make an optimal career decision. Use SMART goals to help you plan your career research.

## WHAT AM I STILL CURIOUS ABOUT?

### MAKE SMART GOALS

- S** Specific (clear and simple)
- M** Measurable (what? how many?)
- A** Actionable (can I achieve this?)
- R** Realistic (do I have what I need to do this?)
- T** Time-based (by when?)

**WHAT STEPS WILL I TAKE TO GET THE INFORMATION I NEED?**

**WHEN?**

**WHAT/WHO DO I NEED?**

**CHECK AFTER DUE DATE: HAVE I DONE THIS? WHAT ELSE?**

■

■

■

■

■

■

■

■

■

■

■

■

■

■

■



# Qualifications @ Unisa

Unisa offers a diverse range of formal qualifications and short learning programmes related to environmental issues. Go to pages 15-17 in this brochure to refer to the distinction between the social and scientific focus areas in environmental studies.

## Undergraduate

- BA General
- BA in Environmental Management and BSc in Environmental Management
- BSc in Life Sciences
- Diploma and Advanced Diploma in Nature Conservation
- Diploma in Ornamental Horticulture and BTech: Horticulture
- National Diploma and BTech: Agricultural Management
- National Diploma and BTech: Animal Health

## Honours degrees

- BSc Honours in Environmental Management
- BSc Honours in Environmental Monitoring and Modelling
- BSc Honours in Geography

## Master's and Doctoral studies

The College of Agriculture and Environmental Sciences has identified a number of research areas in focus groups related to agriculture and animal health, environmental sciences and geography. Learn more about these research areas here: <http://www.unisa.ac.za/Default.asp?Cmd=ViewContent&ContentID=96772>. The following degree programmes are offered:

- Master of Science in Agriculture (Full Dissertation)
- Master of Science in Environmental Management (Full Dissertation)
- Master of Science in Environmental Science (Full Dissertation)



# Qualifications @ Unisa

- Master of Science in Geography (Full Dissertation)
- Master of Science in Life Sciences (Full Dissertation)
- Master of Science in Nature Conservation (Full Dissertation)
- Master of Science in Ornamental Horticulture (Full Dissertation)

## Doctoral Degrees

- Doctor of Philosophy in Environmental Management
- Doctor of Philosophy in Environmental Science
- Doctor of Philosophy in Geography

## Short learning programmes

- Programme in Household Food Security
- Advanced Short Course in Environmental Management Compliance Inspection and Investigation
- Advanced Short Course in Environmental Management Enforcement and Prosecution - Practical Applications
- Advanced Short Course in the Legal Context for Environmental Management Compliance and Enforcement
- Course in Exploring Geographical Information Systems
- Short Course in Community Asset Mapping for Change
- Short Course in Philanthropic Community Foundations
- Short Course in the Introduction to Agribusiness Management
- Short Course in Managing Health and Nutrition in Adverse Conditions
- Workshop in Community Asset Mapping for Change

More information about these short learning programmes is available on the Unisa website at <http://www.unisa.ac.za/Default.asp?Cmd=ViewContent&ContentID=26808>.

# Counselling and Career Development

We provide career, academic and personal guidance and counselling to prospective and registered students by e-mail, in person or by telephone.

Have a question about your career, improving your learning or managing challenges that impact on your studies? Ask a counsellor: [counselling@unisa.ac.za](mailto:counselling@unisa.ac.za)

## Our website

The counselling and career development website contain a number of e-resources to support your career decision-making, how you learn and dealing with personal challenges. Some examples of what is available on our website:

Career resources	Solving career problems, making career decisions, changing career direction, research career options, develop employability and graduateness skills and learn how to use LinkedIn.
Learning resources	Getting started with studies, planning studies and time, learn more effectively, get support, deal with study challenges and exam preparation
Personal challenges resources	Improve wellness, finding a counsellor and what counselling is about.

You can listen to a number of podcasts to support your career, learning and personal development. Podcast titles include: Myths about counselling, Volunteering and your career, Choosing a career, Time management, Making notes, Exam preparation, Getting support and Thinking differently about challenges.

Visit our website:

<http://www.unisa.ac.za/counselling>