



with **Danielle Taljaard**

Antarctic Radar Engineer

WHY DID YOU CHOOSE THIS CAREER?

I have a passion for adventure, a thirst for knowledge, of all that this miracle of a universe has to offer and the ever-growing field of technology. By choosing this career I am lucky enough to combine all my passions into an experience of a lifetime.

WHAT TRAINING DID YOU UNDERGO, AND WHERE?

BEng (Electronic) degree obtained from the University of Pretoria.

WHAT DOES YOUR JOB ENTAIL?

Every December a team of engineers board a ship at the Cape Town harbour and travel across the Southern oceans to Antarctica. Once in Antarctica, it is another journey across thick ice to the South African research base, where the team live and work for the next 14 months. As an Antarctic Radar Engineer, my main responsibilities include operating and maintaining the radar instrumentation, which forms part of the International SuperDARN Radar project, as well as maintaining the base alongside 9 other team mates.

DESCRIBE AN AVERAGE DAY?

Currently I am in my training phase and an average day for me is shadowing a well-experienced, Antarctic-radar-engineer regularly, whilst working hands-on in the lab on various interesting projects, in preparation for the adventure to come.

IN 1 SENTENCE, DESCRIBE YOUR JOB?

It is the most exciting and challenging job at the same time.

WHAT ARE THE MOST ENJOYABLE ASPECTS OF YOUR POSITION?

The most enjoyable part of my job would have to be the satisfaction of solving complex problems and seeing the working end-result, when it all comes together. Secondly, is being able to be in the fortunate position where my engineering career, allows me to work in an outdoor environment as opposed to being office-bound.

CAREER HIGHLIGHTS?

Being this early in my career I would have to say that my first highlight would be the start of my career (going up on the stage and receiving my degree, not only serving as a reward for a lot of hard work put into attaining my qualification, but also serving as a promise of a future of endless opportunities just waiting to be taken) Secondly, being selected as the radar engineer (one of ten people) for the 56th South African National Antarctic Expedition, was a great honour and an amazing highlight.

ADVICE FOR GRADE 11 AND 12 LEARNERS CONSIDERING THIS CAREER?

For this position I believe you first and foremost need a willingness to learn, a sense of adventure and a "make-the-best-of-every-situation" type of attitude.

3 IMPORTANT QUALITIES THAT YOUR POSITION REQUIRES?

Lots of patience. The ability to think clearly and logically. The ability to communicate your ideas well.

TYPE OF PERSON THAT WOULD ENJOY THIS KIND OF CAREER?

A career in engineering has room for a whole spectrum of different personalities. If you have a keen sense of adventure, can think outside the box, can work independently and within a team, then you will find this career especially appealing.

WHAT QUALIFICATIONS DO I NEED?

Firstly, it is very important to take mathematics and physical science at school and work hard at them. You can then go on to study electronic, computer, mechatronic engineering at a tertiary institute.

EXPERIENCE VS TRAINING?

I believe these two concepts absolutely go hand-in-hand. Training is the gateway to gaining experience and with every new experience, more training is once again required. The field of engineering is constantly evolving and developing, so I think the age old advice of "Never stop learning" is very applicable and you should find a learning opportunity in every experience you come across.

IS CONTINUING EDUCATION AND FURTHER STUDIES IMPORTANT IN YOUR TYPE OF CAREER?

I would definitely say so! In any field of engineering (especially Science and Technology), it is very important to continue educating yourself in order to stay on top of the competition and keep up with the ever-growing technology advancements.

" You should find a learning opportunity in every experience you come across"

