

Internship Spotlight:

Lefu Maselepo, 22

Mechanical Engineering Student at the University of Botswana

Tell us about your upbringing in Lesotho.

I was raised in Ha Phoofole in Lesotho's Berea district and graduated as one of the top students in Lesotho in my cohort. Subsequently, I received a scholarship from the Government of Lesotho to study at the University of Botswana.

What are you currently doing?

I am currently in the 4th year of my 5 year mechanical engineering program the University of Botswana. During my studies, I focused on energy technologies as well as product design and manufacturing. At STG, I am currently doing my industrial training requirement for my program and I will be returning to start on my thesis in the next semester.

How did you become interested in engineering?

In school, I had been good in math and engineering and my teachers encouraged me to further study these fields. However, the ultimate decision to study mechanical engineering was based on my realization that engineering can have a huge impact here in Lesotho and elsewhere in Africa. The private sector is still very small in Lesotho and many engineering projects are carried out by foreign companies. I want to change these circumstances and contribute to entrepreneurship and technological innovation in my own country and elsewhere in Africa.

What led you to join STG?

My main interests are in the renewable energy sector, especially solar energy, and product development involving CAD software. STG is one of the few organizations that does this kind of innovative and cross-cutting engineering in Lesotho and I am glad that I got the opportunity to work here.

What have you been focused on during your internship at STG?

My main interest here is in the product development of energy technologies, or turning an idea into a CAD design and subsequently into a finished product. At STG, I had the opportunity to be actively involved in the design and manufacture of STG's new solar parabolic trough collector design and the whole process has been very exciting.

Other tasks I worked on were the installation of electricity demand monitoring systems at health clinics as well as the design of a new construction facility for the manufacture of our solar collectors.

What does the future hold for you after you complete your engineering degree? What are your short- and long-term goals?

I will return to the University of Botswana in September to start writing my thesis. I do not have a specific topic yet, but I hope I will be able to continue and work at the intersection of product development and renewable energy technologies.

After finishing my degree, I plan to work in the emerging renewable energy sector in Africa. There are many start-up like companies that combine novel solar, wind and hydro technologies with smart distribution models that bring electricity to new consumer groups and establish a local energy industry.

In the long term, I want to be based in Lesotho and work for companies like STG in the energy sector that do projects locally and train people here.