

SANRAL Training Academy offers crucial engineering experience

The South African National Roads Agency SOC Ltd (SANRAL) provides crucial training to engineering graduates at its Training Academy in Port Elizabeth, where it assists graduates to gain experience in key training areas (site, laboratory, design) required for registration as a professional engineer.



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“The advantage of being part of SANRAL’s Training Academy is that it affords young graduates the opportunity to participate in a structured training programme under the supervision of experienced professional civil engineers. They gain experience which will allow them to achieve the expected outcomes required to register with the Engineering Council of South Africa (ECSA) and to take their rightful place in the civil engineering industry,” said Ivan Ellis, Training Academy mentor and professional civil engineer.

More women graduates

SANRAL established its Training Academy in 2014, starting with three engineering graduates who had completed their civil engineering studies under a SANRAL bursary. This number has since grown to 27 graduates, including three from the Eastern Cape Department of Transport, who have been seconded to the Training Academy to gain experience in the planning and design of road infrastructure. In an industry that has always been male dominated, Ellis finds it very encouraging that 10 of the 27 graduates at the Academy are women.

Its Candidate Training Masterplan enables candidates in meeting ECSA outcomes. Participants undergo intensive training in the investigation and design aspects of projects under SANRAL’s continuous national road programme of works.

The masterplan covers all disciplines of road engineering, primarily focused on:

- Geometric design
- Traffic analysis and capacity
- Materials investigation and utilisation
- Pavement and materials evaluations and design
- Storm water drainage (including sub-surface drainage)

Some of the projects that the graduates are currently working on include the N2 Sections 12 and 13, from Nanaga to Komgha River and the R75 between Uitenhage and Graaff-Reinet. These include all facets of design where young engineers produce designs, drawings and contract documentation for the projects to advance to the construction phase. In most cases, the graduates are given the opportunity to visit sites to observe the outcome of their work.

Students' successes

Derusha Govender from Durban was a SANRAL bursary recipient. "The post-graduate engineering experience provided by SANRAL to its graduates, is not comparable to any other organisation. One simply cannot get the same experience elsewhere. I am proud to work for a company that places a great amount of emphasis on the professional development of the young talent joining the company, not only enhancing technical skill but also in nurturing leaders of the future."

Govender graduated in 2014 with a BSc Civil Engineering degree from the University of KwaZulu-Natal (UKZN). Before joining the Training Academy in Port Elizabeth, she gained site experience at Mount Edgecombe Interchange for 17 months (February 2015 - August 2016). Thereafter she worked at the Soilco Materials Investigations from the beginning of September 2016, for five months.

Nonkululeko Nzimande and Origin Sengwane both graduated with BEng in Civil Engineering degrees from the University of Pretoria in 2014. They are both SANRAL bursary recipients and received three months of road materials laboratory experience, two months of land and survey experience and 18 months of site experience before joining the Training Academy this year.

Nzimande, who is from Richmond in KwaZulu-Natal, said, "The SANRAL programme is good and structured in comparison to that of private companies. My goal is to be a materials specialist one day." When she is not working at SANRAL, she is busy studying towards her Honours degree at the University of Pretoria.

Sengwane from Johannesburg is currently in his final year of BEng Honours at the University of Pretoria. He hopes to start working on his Masters degree (MEng) next year. "The mentors at SANRAL are knowledgeable. This is a good programme because of the resources at our disposal. The experience we gain allows us to decide whether we'd like to work as a generalist civil engineer or specialise one day."

The nature of the work offered to candidates at the Training Academy equips candidates to fulfil the design-related requirements towards becoming registered as professional engineers.