

Facility addresses engineering shortage

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THE OPENING of a new engineering facility at the aims to address the shortage of civil engineers across South Africa, and to produce graduates who will strategically focus on research related to harmful emission reduction.

The country's first Engineering 4.0 facility launched within the University of Pretoria (UP) this week. The facility has a unique approach to its curriculum, which focuses on improving transport infrastructure across the provinces, particularly due to the high levels of traffic.

Civil Engineering Department head Wynand Steyn said: "Engineering 4.0's research is concentrating on the reduction of energy consumption levels in transportation. Research will focus on road construction, road use, traffic flow and smart transport systems, now and into the future.

He said the facility worked towards having smarter roads with infrastructure that would compliment smart cars. This would help reduce traffic congestion and ensure the safety of passengers, as well as cargo.

"The transporting of food can also be improved to reduce wastage or damage to fresh produce," he said.

Transport Minister Fikile Mbalula said: "Engineering 4.0's focus on reduction of energy consumption levels in transportation is a great achievement for South Africa. It will ensure that the government's future investments and infrastructural developments are based on sound research, and are environmentally friendly.

He said the beneficiaries of these investments would be cities, towns and rural communities that relied on public transport and on our roads



THE engineering building at the University of Pretoria. | SUPPLIED

network for economic participation.

South African National Roads Agency (Sanral) and the Council for Scientific and Industrial Research (CSIR) partnered with UP.

Sanral chief executive Skumbuzo

Macozoma said: "This partnership forms part of the university's future transportation and smart cities research that focuses on leading South Africa into the Fourth Industrial Revolution."

He said Sanral would reap the ben-

efits of material testing at the facility. Future graduates would be prepared for the future world of work in which job creation and economic growth were driven by smart infrastructure and data science.



