

# Prof Liezl van Dyk

**Prof Liezl van Dyk** was born an Industrial Engineer 45 years ago in Belville. However, she grew up and spend most of her life in Pretoria. She is the only person in her household that can optimally pack the dishwasher, even if it cause conflict with her husband, Tobie. Her children are (Karla 17 and Tobias, 14) are always delivered to their school activities by means of the shortest route, all time windows taken into account.

She also studied Industrial Engineering. After completing her BEng and MEng degrees in Industrial Engineering at the University of Pretoria, she obtained, with distinction, an MSc degree (Manufacturing Systems Engineering) from the University of Warwick in the United Kingdom, with the support of a scholarship from the Association of Commonwealth Universities. Upon her return to South Africa, Liezl completed a post graduate diploma in higher education and teaching practice at the University of Pretoria, and later a PhD in Industrial Engineering at Stellenbosch University. She registered as a professional engineer in 2011 and received a C2 (established researcher) rating from the NRF in 2016.

Liezl started her career in 1997 as a junior lecturer in the Department of Industrial and Systems Engineering at the University of Pretoria. She was promoted to lecturer in 2000, and then senior lecturer in 2005. Amongst others, she lectured courses in Innovation Management and Productivity. The family relocated to Stellenbosch in 2005, where she accepted a position at the Centre for Teaching and Learning as e-learning manager of Stellenbosch University. She joined the Department of Industrial Engineering in 2009. In the five years that followed, she established health systems engineering as a research area / niche at Stellenbosch University, and built networks within the local healthcare environment.

From the second half of 2013, she was appointed by the North-West University with the task of developing and implementing the undergraduate and postgraduate curricula for the Industrial Engineering programmes. The first intake of undergraduate Industrial Engineering students was in 2015. On 23 May 2019 the NWU awarded the first PhD degree in Industrial Engineering, with Liezl as promoter, and on 29 May 2019 the first MEng degree was awarded. Under her leadership, the School of Industrial Engineering was established in 2017, with her being the first acting school director. During the same period from February 2015 she also served as research director of the Unit for Energy and Technology Systems. She maintained this position until August 2017, when she started acting as Executive Dean of the Faculty of Engineering, a position to which she was formally appointed on 1 March 2018. Liezl is also instrumental in the establishment of international collaboration agreements, of which the most recent is with the University of Twente in The Netherlands, which also specializes in health systems engineering. Together with colleagues and students from the NWU and elsewhere, Liezl continues to contribute to the expansion of this field in South Africa. Additionally, Liezl is the grant holder of two THRIP-projects valued at a few million rands.

In her career thus far, Liezl has authored and co-authored 42 local and internationally published articles, book chapters and conference contributions. She has supervised twelve completed PhD/MEng studies and more than 60 BEng mini-dissertations. Currently she is the promotor of 2 PhD students. She has delivered more than 20 papers at local and international conferences, including two invited keynote addresses. Liezl serves her professional and academic community as reviewer, external examiner and mentor for candidate professional engineers. She was the 'proceedings' editor for the 2016 and 2017 annual conference of the Southern African Institute for Industrial Engineering (SAIIE) as well as guest editor of the special edition of the South African Journal for Industrial Engineering. She also served on the SAIIE council in 2016, in her capacity as chair of the conference organizing committee.

