The HDCA Education Thematic Group invites you to a webinar on:

# Engineering education for sustainable human development: a capabilities

## approach

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## Wednesday, 6 April 2016

14:00 to 15:30 in Dublin + London (GMT)

15:00 to 16:30 in Spain + Bloemfontein (GMT+1)

19:30 to 21:00 in New Delhi (GMT +4.5)

09:00 to 10:30 in New York (GMT – 5)

# Participants must register to participate in this webinar. To register, receive access to a copy of the text and for any question about the webinar, please contact Sonja Loots at <u>lootss@ufs.ac.za</u> by Monday 4<sup>th</sup> April 2016. Details on how to participate will be sent to you a few days before the webinar.

## Abstract:

Although quantitative problems such as low retention and throughput rates as well as employability concerns are important challenges faced by engineering education institutions, rethinking engineering education outcomes to encompass issues of sustainable human development is an equally important bid. This is because focusing on sustainable human development as the 'Leitmotiv' in engineering curricula and pedagogies can help generate possibilities to address some qualitative concerns in engineering education currently not receiving enough attention in literature. Such concerns include questions surrounding the potential of engineering education to cultivate transversal skills that are indispensable to pro-poor engineering outcomes. That is, engineering outcomes that contribute to social justice through expanding effective opportunities for poor and marginalised communities to do and be what they have reason to value. Drawing from qualitative data based on the views of engineering students (N=18), lecturers (N=10), and employers (N=10) from the global South (South Africa) and global North (Germany), this paper conceptualises the notion of quality in university engineering education through the lenses of the capability approach and human development paradigm. In so doing, the paper illustrates how the capability approach can offer a normative critique of engineering education. It also addresses questions related to the capabilities and functionings enlarged through engineering education, and their implications for pro-poor, socially just engineering professionalism or engineering that is *for* sustainable human development.

**Speaker's Bio:** Mikateko Höppener obtained a Bachelor of Social Sciences degree (Human and Societal Dynamics) in 2008 from the University of the Free State, and a Master of Science degree (Industrial Psychology) in 2012, from Universität Bremen in Germany. She recently submitted her PhD thesis titled 'Perspectives on engineering education in universities and its contribution to sustainable human development in Germany and South Africa'. She has been awarded a post-doctoral fellowship at the Centre for Research on Higher Education and Development at the University of the Free State.

The webinar will be moderated by Veronica Crosbie, Sandra Boni and Sonja Loots