

Cutting-edge technology to be included in Mine Surveyors Competency Certificate

'The mining industry increasingly expects mine surveyors to provide a high standard of information within shorter time-frames with ever decreasing manpower. The rapid advancement in geographic information systems, laser scanning and remotely piloted aerial systems provide opportunities for more accurate data gathering and value-adding interpretation of information to improve productivity,' says Dr Hennie Grobler, President of the Institute of Mine Surveyors of Southern Africa (IMSSA).

Dr Grobler was elected as IMSSA President for the term 2015 to 2016 on 10 September 2015. He serves as the Head of the Department of Mine Surveying at the University of Johannesburg.

'A multidisciplinary approach is required to provide effective and sustainable solutions to the problems currently experienced in the mining industry in South Africa and the region,' he continues.

Because of the rapid changes in technology, new graduates find adapting to the mining culture challenging when they join the workforce.

As a result, IMSSA has initiated dialogue with the Department of Mineral Resources, industry partners, and members aiming to optimize the qualification routes for all surveyors, says Grobler.

'During my term at IMSSA, I plan to improve the assessment format of the Government Certificate of Competency. This Certificate is required for appointment as the responsible mine surveyor of a mine and for professional registration. The Institute wants to see the profession implementing new technology to provide efficient, sustainable solutions to the problems currently experienced by the mining industry internationally,' he says.

'The momentum gained by the current dialogue between the Institute and State must be maintained. It is essential that this cooperation lead to open dialogue and the development of a clear vision of what competence should mean and how it should be assessed. A mutually acceptable model must be agreed upon between the State, industry, and education; and implemented as soon as possible. It is our duty to not only to share our experiences, but to apply this knowledge in developing new skill-sets to fully exploit technologies such as scanning, photogrammetry, automation, and 3D imaging.'

Concludes Grobler: 'It is the duty of this Institute to promote and protect the interests of its members, advance the science and practice of mine surveying, and foster professional etiquette. I hope that we as an Institute can bring about a culture of passing the experience we as members have obtained from the 'school of hard knocks' on to the next generation through mentorship, training, and technical papers, so that they do not have to repeat the same mistakes made in the past.'

The Institute of Mine Surveyors was established in 1923 in order to advise the Government Mining Engineer and promote the science of mine surveying.

Dr Grobler has been a Fellow of IMSSA since 2004. He succeeds Mr Nape Mojapelo as President.

Prior to being elected, he served as IMSSA senior Vice-president and Chairman of the Education committee for the past 7 years. Prior to joining UJ, he gained 16 years of industry experience as the responsible Mine Surveyor at various opencast and underground mining projects in southern Africa.

He holds a doctorate in mine surveying focusing on spatial positioning, a rare qualification in minerals-rich South Africa. In May 2015, Dr Grobler was appointed as an alternate to Wits Professor Fred Cawood on the newly-constituted Governmental Geomatics Council.

In South Africa, mine surveyors are appointed in terms of the Mine Health and Safety Act to be in charge of surveying, mapping, and mine plans at the mine. These responsibilities include the accurate positioning of all surface and underground features in relation to mining boundaries and the monitoring of any structures or objects that may be affected by mining.



Dr Hennie Grobler, from the Department of Mine Surveying at UJ, has been elected President of the Institute of Mine Surveyors of Southern Africa (IMSSA)

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