

## Impact of the 4th Industrial Revolution on Engineering in Defence

*Venue: Diamond Auditorium, CSIR International Convention Centre*

TIME	THEME	TIME	SPEAKER
07:30-08:10	Registration	40 min	-
08:10-08:20	Opening	10 min	Lt Col Marlette van Rooyen (Sys. Eng. , DAFA, SAAF)
08:20-08:30	Welcoming Address	10 min	Mrs Mondé Süssmann (Corp. Support, Armscor)
08:30-09:05	Keynote speaker	35 min	Prof Daniël Mashao (Executive Dean, Faculty of Eng. & Built Environment, UJ)
09:05-09:40	Introduction to Artificial Intelligence	35 min	Dr Hildegarde Koen (Senior researcher, C2S, CSIR)
09:40-10:10	Morning break - Tea/Coffee	30 min	-
10:10-10:45	Impact of the Fourth Industrial Revolution	35 min	Mr Cobus Oosthuizen (CEO – Siemens Industry Software SA)
10:45-11:20	How to keep a competitive advantage in the defence industry	35 min	Dr Liza Åbom (VP & CTO, SAAB Aeronautics)
11:20-11:55	Digital Image Processing and Machine Learning for Displacement and Acceleration Measurement	35 min	Mr Kyle Winnaar (Flamengro, Armscor R&D)
11:55-12:30	Brains & Bolts – A Future of Work	35 min	Mr Barry Vorster (Partner/ Director, PwC)
12:30-13:30	Lunch	60 min	-
13:30-14:05	Utilizing 3D Printing, a Digital Twin and Smart Sensor Suites, for the Development of a Novel Warhead for a Medium Calibre Arena Defence Projectile	35 min	Mr Adriaan Steenkamp (Flamengro, Armscor R&D)
14:05-14:40	Unpacking 4IR within a Military FASELIFT Capability	35 min	Mr Dhavan Reddy (DDSI, Armscor R&D)
14:40-15:15	Machine Learning Techniques on a Digital Twin of a Turreted Autocannon to Diagnose Failure Modes	35 min	Mr Pitso Mangoro (Flamengro, Armscor R&D)
15:15-15:30	Afternoon break - Tea/Coffee	15 min	-
15:30-16:05	Different types of power generation	35 min	Mr Madodana Mfana (CEO, Sovereignty Systems)
16:05-16:40	Passive Radar Systems (PCL) and their use in the Military	35 min	Mr Sicelo Ngubane (MD, MND Technologies)
16:40-16:50	Closing	10 min	Mr Molahlegi Molohe (Acquisition, Armscor)

