

INCOSE SA Youth Outreach

Greatest Young Systems Engineers of the Year (GYSEOY) challenge

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They say it is pronounced ***g-eye-soy*** or ***jaai-sooi***. If you are not familiar with the new INCOSE SA Youth Outreach programme, then stay tuned. The goal of this initiative is to establish a proficiency in – and a love for – Systems Engineering in our up and coming engineers, by means of a challenge to solve a defined business problem using advanced system engineering principles, including model-based techniques. The participants are engineers with 2-3 years working experience and still developing their Systems Engineering skill set.

Teams are given a business problem statement. They then follow the Systems Engineering process, as tailored by them, to take the problem from infancy and nurture it through the exploratory research and concept stages. The final deliverable is a system design description generated from Vitech Corporation's CORE™ software tool, which will be evaluated by a panel.

This exercise started only a few days ago, on the 1st of June. Four teams are competing in this inaugural competition and they start with a week of training, delivered to them by Ad Sparrius, Cobus Scannel and Shahen Naidoo. I was able to spend some time with them to see if they are learning anything. I arrived on the third day, as they were starting to use CORE to apply the theory they were taught the first two days. They said things like “these state-machine diagrams are useful” and “we like this model-based systems engineering.”



From here, they'll split into their respective groups and execute the systems engineering process. Their first set of system requirements will be reviewed towards the end of July and their eventual deliverables will then be evaluated by an expert panel, comprised of Louwrence Erasmus, Mladen Poluta and Riaan van der Walt. The results of the challenge and the winning team will be announced during our [11th annual INCOSE SA Systems Engineering Conference](#), to be held in Pretoria from 16 to 18 September 2015.

These are the four teams participating in the GYSEOY Challenge:

From Armscor:

- Oubrey Maditsi
- Victor Ndala
- Morne Rapuling
- Ashlin Ramdas



From Denel Land Systems:

- Cameron Pillay
- Pooven Pillay
- Sergio Pillay
- Gundo Pillay-Phathela



From Denel Dynamics:

- Elsabe Ebersoh
- Jeff Joseph
- Purusha Naidoo
- Mmakwena Ramatshela



Also from Denel Land Systems

- Marius Veldhuyzen van Zanten
- Tebogo Bopape
- Butana Mabunda
- Vidhya Vallatt



A huge thanks to Ad Sparrius, Cobus Scannel, Shahen Naidoo for the time and effort to train these young engineers and coordinate the challenge. Also to Louwrence Erasmus, Mladen Poluta and Riaan van der Walt who will be taking care of the evaluation. Finally, we thank Denel Dynamics for providing a venue for the training.