
ECSA in partnership with the Department of Higher Education & Training, the merSETA, and SASEE.
Engineering Education Summit

• In 2011 ECSA conducted research into the barriers preventing engineering students from passing on the 4 year BSc Engineering program.

• What motivated the research?
An analysis of the 2001 national intake cohort of engineering students at SA HEIs.

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<th>Graduated within 5 years</th>
<th>Still registered after 5 years</th>
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<tbody>
<tr>
<td>4 year Bachelor’s (Eng)</td>
<td>54%</td>
<td>19%</td>
</tr>
<tr>
<td>National Diploma (Eng)</td>
<td>17%</td>
<td>14%</td>
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<th>African</th>
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<tbody>
<tr>
<td>4 year Bachelor’s (Eng)</td>
<td>32%</td>
<td>64%</td>
</tr>
<tr>
<td>National Diploma (Eng)</td>
<td>16%</td>
<td>28%</td>
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Research identified seven areas to be addressed

1. School system
2. Student selection
3. Engineering Curriculum
4. Teaching and learning
5. Student support
6. Staffing
7. Funding
Consultation between DHE&T & ECSA

• Research findings presented to the Department of Higher Education & Training (DHET) (Dec 2011)

• Two further areas to be addressed were identified

8. Workplace Integrated Learning (WIL) ……… Nat. Diploma
9. Articulation between FET Colleges and Universities
Engineering Skills Summit Conceptualised

• As consequence ECSA & DHET undertook to host the Engineering Skills Summit in partnership with the Department of Higher Education & Training (DHE&T) during 2012.

• merSETA and SASEE
Purpose of the Engineering Skills Summit 2012

• National debate on barriers to student success

• Share ECSA’s 2011 research report:
  “Throughput study in the Engineering Bachelors Degree”

• Develop Recommendations & Resolutions to present to the Minister of Higher Education

• Impact Policy & Practice i.r.o. Engineering Education
Development of a national strategy to increase engineering graduate output

To view the presentations please click on the icon next to the facilitator’s name on the programme page

Who should attend?  The Venue  Conference Sponsorship & Collaboration
Summit Delegates

- A total of 230 delegates attended the summit 16 Oct

- Conference Delegates included a wide range of stakeholders:
  - Higher Education Institutions,
  - Further Education and Training (FET) Colleges,
  - industry and commerce,
  - Government department at all three tiers.
Message from the Minister of HE&T.

• Dr Engela van Staden was speaking on behalf of Higher Education and Training Minister Blade Nzimande at the 2012 Engineering Skills Summit, in Kempton Park.

• DHET would heed the call to reconsider the funding model pertaining to engineering faculties

• South Africa lagged far behind in the number of engineers proportionate to population, compared with the UK, Australia, Brazil, and India.
Summit Themes and Discussion Groups

1. School system & Student Selection
   Prof Almarie van Heerden

2. Curriculum aspects and interventions
   Prof Ian Scott

3. Teaching and learning
   Prof Jenni Case

4. Student support
   Chantyl Mulder & Dr Dianne Grayson
Summit Themes and Discussion Groups

5. Staffing
   Dr Allyson Lawless

6. Funding
   Prof Melck

7. WIL
   Prof Tshilidzi Marwala &
   Dr Raymond Patel

8. Articulation
   Dr Keith Jacobs
Post Engineering Skills Summit

• Detailed report containing recommendations form each of the eight discussion groups have been received.

• Consolidation of the sub report into a comprehensive Summit Report in currently underway.

• The final Summit Report containing recommendations for the Minister of Higher Education and Training Minister Blade Nzimande will be presented during the first week of December 2012.

• Recommendations will influence policy and practice of Engineering education which in turn will lead to increased engineering graduate output.
Thank you - Enkosi - Ha khensa - Re a leboga - Ro livhuwa - Siyabonga - Siyathokoza - Dankie