

Building Engineering Capacity Through the Accreditation of Engineering Education

[This project is supported by of the Royal Academy of Engineering under the Africa Catalyst Scheme]

Project Summary

Our members are by now aware that the Institution had put in an application for funding a project on Engineering Capacity Building to the **Royal Academy of Engineering UK (RAEng)** <http://www.raeng.org.uk/about-us> under a Scheme called the **GCRF Africa Catalyst**, which was launched on 14th September 2016 during a **Conference of the Council of Academies of Engineering and Technological Sciences (CAETS)**, <http://www.caets.org>, hosted by the Academy at Savoy Place in London (the Headquarters of the famous Institution of Engineering and Technology, previous known as the Institution of Electrical Engineers). The theme of the Conference was “Engineering for a Better World – Capacity Building in the Developing World.

What our members may not be aware of is that two of the Past Presidents of IEM, viz Jagadish Soobarah and Jayesh Desai attended that Conference with the support of the RAEng.

Another surprise, “de taille” as we say in Mauritius, was that the H. E the President of the Republic of Mauritius delivered one of the keynote addresses on that occasion. If we may quote from the highlights of the Conference as reported on the website of the RAEng :

Quote:

Dr Gurib-Fakim commented that **“only through science, technology, engineering and mathematics can we as a global community increase the prosperity of our people”** and called for more measures to attract girls to science and engineering. Unquote

IEM's Application

We reproduce hereunder extracts from IEM's application to highlight the objectives to be achieved.

Firstly : To creating an awareness among stakeholders, concerned with education, training, professional competence development and employment of engineers in Mauritius, that delivering engineering degree programmes to an internationally agreed academic standard is key to building engineering capacity in the country, as well as enhancing the employment of engineers, including their cross border mobility prospects.

Secondly : to reassure them that such a standard (e.g. Washington Accord), has been in existence for more than a decade, and that implicit in that standard is an accreditation process which places emphasis on what has been learnt and can be demonstrated rather than what is taught, and to familiarise them with the accreditation process.

Thirdly :to train Leading professional engineers likely to be involved with administration of accreditation, and interested Engineering faculty staff involved in design and delivery of engineering programmes, on: (i) the deliverables expected from accredited engineering programmes, and (ii) the applicable criteria for compliance with Washington Accord, and the interpretation of these criteria. They will be informed of the process for ensuring compliance with the standard.

Another objective of the Pilot Project is to ensure that a first cohort of engineers and academics, with adequate competence to undertake the accreditation of engineering degree programmes, is available in Mauritius for serving as Evaluators and Team Chairs, under the purview of an eventual Engineering Accreditation agency. Institution of Engineers Mauritius (IEM) has decided to work towards seeking signatory status of the Washington Accord, which is the internationally recognised forum in matters of accreditation of engineering degree programmes for professional engineering practice.

This project is being driven by the IEM, founded in 1948, the largest of the professional engineering bodies in Mauritius, whose membership comprises engineers of all disciplines. The prospect of

benefiting from the RAEng funding under the GCRF Africa Catalyst Programme is seen by the IEM as an opportunity for Mauritius to establish an engineering accreditation regime.

The Institution of Engineers Mauritius is certain that its present initiative (this Pilot project) to establish an engineering accreditation regime has the potential to spiral into a demand for accreditation of engineering programmes by the various Universities established in Mauritius, which if undertaken would signify a major boost to the economy, thus contributing to Government's own efforts towards transforming Mauritius into a Regional Education Hub. The GCRF Africa Catalyst Programme is therefore a truly welcome opportunity for Mauritius.

A Working Group on Engineering Accreditation, set up by IEM, considers that this project fully satisfies GCRF Africa Catalyst Programme objectives and the applicable criteria for favourable consideration. Implementation of the project will certainly send the proper signals to prospective students who would find therein informed options when searching for recognised programmes of study, as well as dispelling any doubts that engineering graduates could have entertained as regards the recognition of the Mauritian engineering degrees by international agencies. Employers would also see therein the assurance they may have been looking for about the professional competency of their future engineers.

About the Royal Academy of Engineering and the CAETS:

We acknowledge with thanks the following information drawn from the RAEng website from a report on the highlights of the CAETS Conference, under the signature of Shenel Otkay at the Royal Academy of Engineering. E-: [Shenel Otkay](mailto:Shenel.Otkay)

1. Royal Academy of Engineering. As the UK's national academy for engineering, we bring together the most successful and talented engineers for a shared purpose: to advance and promote excellence in engineering. We provide analysis and policy support to promote the UK's role as a great place to do business. We take a lead on engineering education and we invest in the UK's world-class research base to underpin innovation. We work to improve public awareness and understanding of engineering. We are a national academy with a global outlook.

We have four strategic challenges:

- Make the UK the leading nation for engineering innovation
- Address the engineering skills crisis
- Position engineering at the heart of society
- Lead the profession

2. CAETS is an independent non-political, non-governmental international organisation of engineering and technological sciences academies, one member academy per country. For more information about CAETS and the membership countries go to: <http://www.caets.org/>

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