

Mapping UNSW Impact Global Development

Primary SDG	4: QUALITY EDUCATION
Broad theme	Accrediting universities
Research	Helping establish and implement education standards for engineering degrees, and to accredit universities
Impact region	Myanmar
Faculty	Engineering
School/Institute	Electrical Engineering and Telecommunications
Academic	Professor Eliathamby Ambikairajah
Project partners	Yangon Technological University, Myanmar Engineering Council, University of Mandalay
Related SDGs	9: Industry, Innovation and Infrastructure

Elevator pitch

Eliathamby (known as Ambi) is calling on his deep accreditation experience in Ireland and Australia to help Myanmar's Engineering Council establish global education standards and accredit local universities, lifting the quality of engineering education and research across the country and ultimately the quality of development projects.

The Challenge: Myanmar needs global standards and to accredit unis for the first time

As the country democratises, Myanmar is in the process of building and aligning itself with the world. Engineering is a major centrepiece in this change but university curricula need to be updated if courses are to satisfy quality assurance standards. Staff and researchers also need training, and laboratories, built over 60-70 years ago, are basic and lack compatibility. The good news is there are many universities in Myanmar in the engineering space, and most of them want to receive accreditation so they can attract and produce high quality students.

UNSW's solution: Advise on accreditation standards, mentor process at university level

Eliathamby was previously the Chair and a panel member of the Engineers Australia University Accreditation Panel. Based on this and previous experiences in Ireland, he was invited to Myanmar by the Myanmar Engineering Council (MEngC) in 2016 to help them accredit university programs. He held two workshops for over 50 MEngC evaluators on university operating environments, the quality of programs, the delivery of programs, staff backgrounds, and how the program is taught to ensure universities satisfy accreditation standards.

MEngC suggested Eliathamby first look at Yangon Technological University (YTU), the top engineering university in Myanmar. He then led a workshop for YTU engineering academic staff to help them prepare for the accreditation process. This involved training more than 30 staff about what was required to comply with international accreditation processes and benchmarking. To help MEngC further, Eliathamby was invited to

observe of live accreditation of Mandalay Technological University (MTU) in 2017 (the second top engineering university in Myanmar). During this live process, he mentored the MEngC panel evaluators, MTU staff, responded to questions and provided feedback. He has been invited back to Myanmar in 2018 to oversee the MEngC's assessment of the full accreditation of YTU. With further funding, Eliathamby is interested in taking UNSW staff to Myanmar to help local university staff further advance the quality of teaching and research.

The Impact: Lift engineering education standards and the quality of students and development

Eliathamby is helping MEngC to establish and implement global engineering program standards in the country. This includes working with the top two engineering universities to help them make changes to achieve these standards and receive accreditation. This work ultimately improves the quality of engineering programs, educators, and graduates. Graduates will go on to positively impact engineering development in the country. Once MEngC has conferred full accreditation at an international level to YTU and MTU, the two universities will become a standard for other universities to follow, lifting engineering education and development standards across the country.

Researcher

Professor Eliathamby Ambikairajah is Head of School of Electrical Engineering and Telecommunications at UNSW. He was previously Head of Electronic Engineering and later Dean of Engineering at the Athlone Institute of Technology (AIT) and a Research Fellow with British Telecom Laboratories. He is a regular reviewer for IEEE, IET and other journals, he is a Fellow and a Chartered Engineer of the IET UK and Engineers Australia (EA), and he is a Member of the IEEE. Eliathamby is motivated by a strong desire to share and transfer his knowledge and expertise to people in need.

Ben Falkenmire 01.08.18