

Programmatic Review 2015
School of Engineering
Date of Review: Thursday, 07 May, Friday 08 May 2015

Recommendations of External Panel and Proposed Actions of School

The school was commended for its success to date and especially in relation to Polymer and Software along with the progress in which it has made in the field of research. However, the panel recommended that the school should now enter a period of consolidation whereby the activities are clarified and presented both internally and externally in a more simplified and coherent form. Furthermore, the activities and work of the school should be reorganised so as to free up more time to permit staff to undertake functions necessary to ensure the success of the school into the future. Overriding all of the recommendations below, the panel strongly recommends to the institute that the SoE develops a clear strategic plan consistent with that of the institution and implements same. This plan will have to encompass the recommendations below including programme portfolio reorganisation, consolidation and simplification of pathways, reduction in teaching hours, enhanced information for prospective students, more targeted marketing, formalized structures for engagement with regional industry, and rigorous and consistent oversight and support for the placement element within programmes.

Recommendation 1	Proposed Action (Interim Report Jan 2016) of School
The programme portfolio and delivery mechanisms to be reorganised across the three major themes, Civil Engineering, Polymer & Mechanical Engineering, and Electronics & Computer Engineering to provide a common first year and, as much as possible, a common second year; this should encompass shared modules and potentials for sharing with other schools. This will have the benefit of reducing the workload of staff and thus freeing up staff time which is required to support other recommendations arising from the review.	<p>The possibility exists to create a common First Year Mechanical/Civil if we offer a 4-Year ab-initio degree in Civil Engineering. This is now more viable with the 2+2 arrangement with Luoyang university, China. Currently Software Degrees (Computer engineering) are too distinct from other engineering disciplines to make common with broader engineering degrees.</p> <p>Three Year common entry cross-disciplinary programmes do not exist for practical reasons.</p> <p>However, we already have more common entry programmes than any other IoT on three year engineering programmes.</p> <p>We do not have a four-year degree in electronics with which to make common with other 4 year programmes.</p> <p>Mechanical and Polymer have been made common, until now two distinct disciplines.</p>
Recommendation 2	Proposed Action of School
That the teaching contact hours for students be reduced as follows: a maximum of 24 hours per week for year 1, a maximum of 22 hours per week for year 2, and an appropriate reduction for year 3 and year 4. In addition, blended learning and problem based learning to be enhanced across all three disciplines within the school. Staff time released should be allocated to specific duties aligned with the implementation of these recommendations.	<p>A survey from all IoTs is ready for publication on this issue. The Faculty of Engineering is in line with best practice in these institutes. We will reduce hours in Years three and four where feasible.</p> <p>One year add-on programmes cannot comply with less than 24 hours for obvious reasons.</p>
Recommendation 3	Proposed Action of School
That the school enhance its pre-CAO information. That prospective students be provided with information on the school's graduate attributes	An increase set of information to prospective students has already started and there has been far more active engagement with schools. Graduate attributes and the

and employment prospects and locations. That there be a special focus on information for transition year students. The school should work to improve the first year experience and use its excellent building to attract students. The institute support systems should be promoted and a focus on such support and participation should be placed in the first few weeks of each programme.	<p>manner of their adoption within the Faculty of Engineering has yet to be agreed by the institute, but will be adopted and implemented in the faculty once those discussions are complete. A survey of other practices nationally and internationally is underway.</p> <p>More initiatives have been implemented as outline in Programmatic Review for First Years and will be made institution wide.</p>
Recommendation 4	Proposed Action of School
The recruitment, including more gender balance, and retention of students, needs more specific assignment of roles to staff in the school working with central institute support staff. In rationalising the modules and the common years and reducing the student contact time, it is proposed that staff time be freed up and assigned to specific areas to address matters such as attrition rates, retention, recruitment etc.	<p>Allocation of contact hours for specific duties other than teaching is a matter for institute policy.</p> <p>Every effort is made to attract more females to engineering and IT and female staff are visiting schools.</p> <p>An initiative to retain female students with a mentoring programme will be started. Female staff will be engaged to provide support.</p>
Recommendation 5	Proposed Action of School
That the critical and unique role which the school plays in the region be further developed by the establishment of a formal Industrial Advisory Board for the School. It is recommended that this board would hold meetings on a biannual basis. The panel noted that the stakeholders were fully supportive of this.	Fixed Advisory panels will be implemented by June 2016. A List of industrial representatives has been drawn up and a structure and organisation is under discussion.
Recommendation 6	Proposed Action of School
That a clearly defined schedule be drawn up for each programme within the school. This schedule should include details of all industrial placements and be provided to all students across the three disciplines at the commencement of each academic year.	The Course manuals will be reviewed to see if they can be improved to make placement and other issues clearer.
Recommendation 7	Proposed Action of School
That the industrial placements be resourced and formalised at both school and programme level. Formalise the placement management and information.	This is currently under discussion among the Deans. The Faculty of Engineering and Informatics will move to centralise some of the placement load currently held by academic staff members.
Recommendation 8	Proposed Action of School
That the school portfolio of activities including a rebranding of the Trades maintained be clearly aligned with the strategy and ambitions of the institute and in doing so aim to fulfil the key performance indicators.	This recommendation is unclear but a great deal is already planned and underway in the Trades area.
Further suggestions of the Chair	

Offer electives in year 1, 2, & 3 rather than specific niche programmes at 1 st year	This is already underway and a strategy agreed with EMT. It is part of a much wider and more informed discussion on marketing and service positioning.
More on-line delivery of modules to give flexibility in delivery and economic use of resources	The Faculty of Engineering and Informatics continues to lead the institute with on-line delivery.
In-house learning support specific to engineering from engineering academics	This chairman's recommendation is unclear, but maths and IT supports are in place for many years.
That the scarcity of female students in the school be addressed.	Commented on above
Consider local pastoral systems.	This is already in place at institute and faculty level.
Redevelop the AIT website.	This is underway.
Market all programmes effectively, put a plan in place.	This is ongoing
Establish and disseminate student employment figures.	This is something that is important and we are developing a system to capture this although it is resource dependent.