APC Resolution on the proposal to create an International Master of Engineering Program in Electrical and Computer Engineering at Duke Kunshan University

Introduction:

Subcommittee B of the Academic Programs Committee reviewed the proposal to create an International Master of Engineering Program in Electrical and Computer Engineering at DKU on February 21, 2018. Ravi Bellamkonda, Vinik Dean of the Pratt School of Engineering, Susan Bonifield, Associate Dean for Finance and Administration in the Pratt School of Engineering, Krishnendu Chakrabarty, William H. Younger Distinguished Professor and Chair, Department of Electrical and Computer Engineering, Jim Dobbins, Associate Vice Provost and Director, Office of Duke Kunshan University Programs, and Xin Li, Professor, Department of Electrical and Computer Engineering were in attendance as representatives for the proposal. APC was provided with the following documents for review: Memos from the Global Priorities Committee and Master's Advisory Council following their reviews of the proposal, and a revised proposal based on the suggestions by GPC/MAC (dated February 13, 2018). The November 20, 2017 version of the proposal was provided as reference.

Summary of Discussion

The following topics were raised and addressed to the satisfaction of the committee:

1. The similarities and differences between the MEng offered at DKU and the Duke MEng were described; the only two differences between the former and the latter are that the DKU degree has one residential year in DKU and one at Duke, and a summer internship in East Asia. Given that prospective employers are interested in recruits with experience in the PRC, it is planned for most students to do their summer internship in the PRC. The second year at Duke is mandated, which may necessitate a negotiation for approval with the Ministry of Education (MOE-China).
2. All envisaged faculty hires at DKU and Duke are expected to be tenure-track. If full student projects are realized (100 after four years), then 4.5 FTE hires are expected at DKU and 4.5 at Duke. Of these, the 0.5 FTE is already in place (Professor Xin Li).
3. Outstanding teaching and communication skills at the undergraduate level will be an expectation for the DKU hires, since these faculty may well teach in both, the undergraduate and graduate programs.
4. Faculty governance at DKU in relation to hiring and promotion follows the current DKU standard operational procedure. Duke oversight is maintained through majority appointments on each of the respective committees tasked with hiring/promotion recommendations. If the degree is transferred to DKU, then a stronger and broader DKU faculty governance would be introduced.

5. It is expected that DKU faculty will have at least one semester of immersion at Duke's Pratt School of Engineering, and that this interchange will be the norm.
6. DKU faculty will be mentored by senior Duke faculty (or by Duke-DKU joint appointments), and folded into Pratt's current development of a more robust mentoring program.
7. Tenure at DKU will have a slightly different mix of expectations compared to Duke: of (1) teaching (approx. 40% weight); (2) research (40%); and (3) service (20%).
8. Lab setup costs at DKU are expected to be minimal. Most research and industry engagement of engineering faculty is expected to be in the form of consultation with high-tech industry wanting problem-solving, something that can be addressed with computer technology.
9. Communication is in English, and reinforced by dedicated English courses, emphasizing degree and industry-specific language and the appropriate cultural learning. Additional hires in the writing and language programs at DKU will support this teaching.
10. Although the majority of the DKU MEng ECE cohort is expected to be from the PRC, and 70% of the MEng ECE cohort at Duke is already from the PRC, the graduate pool of Engineering is not dominated by PRC students, and neither is the graduate pool at Duke. Given appropriate encouragement and structuring in relation to integration, exposure to a diverse population is possible. The expectation of DKU for a diverse campus has already been considered by the DKU board, and the proposed MEng is seen as compatible with DKU's diversity goals.
11. The strong commitment of the program director to the program, along with the enthusiasm of the relevant leadership at Pratt, suggests that practical issues in relation to committees, workload, and travel, will be worked out as they arise.

Resolution:

APC recommends to the Provost that the proposal to create an International Master of Engineering degree in Electrical and Computer Engineering at Duke Kunshan University be approved. Overall APC was impressed with the quality of the proposal and the openness of its proponents to address the committee's questions and seek out solutions to potential issues as they arise in the implementation of the new degree.

Vote: 12 in favor, one against, one abstained, two did not vote