November 20, 2015

Dean Scott Herness
Interim Vice Provost for Graduate Studies
Interim Dean of the Graduate School
Graduate School
250 University Hall
230 North Oval Mall
CAMPUS

Dear Scott,

The Graduate Studies Committee of the Department of Electrical and Computer Engineering has reviewed and discussed the proposal submitted by the Department of Electrical Engineering at Wright State University, regarding the development of a Doctor of Philosophy program. A number of issues have emerged with the proposal, of philosophical and procedural nature alike. To summarize the discussion, it is perhaps convenient to answer the questions that you have suggested in your email of October 22, 2015. Specifically:

1. *Does the proposal conflict with anything that we presently offer (or plan to offer) at OSU--and, if so, does such a conflict raise cause for concern?*

There is clearly a substantial (as matter of fact, an almost complete) overlap with the content of the proposal from WSU in terms of topics and sub-disciplines with our PhD program at ECE. As a matter of fact, all three thrust areas of the proposed plan (Controls & Robotics; Electronics, Microwave, VLSI, & Nanotechnology; Sensor Signal & Image processing) are extensively covered and represented in our own graduate program. It is not clear what novelty (if any) in terms of topics and content will the proposed PhD program bring to the table. In this respect, the GSC would have appreciated an effort on the proposers' part to differentiate their program from other institutions in Ohio, not just OSU. Having said that, the GSC does not think that the WSU program would constitute a threat to our own PhD program in terms of diverting a portion of our traditional student population, given the gap that undoubtedly exists between the two in terms of quality, reputation and size. The student basin for the two programs is likely to be different, with the one of WSU projected to the essentially of local nature. The main concerns of the GSC, however, regard the possibility of future diversion of already scarce State resources from a well-established, world renowned PhD program at OSU to a much smaller (and less reputable) one. The GSC, however, did not have additional information to assess whether this is a legitimate concern or not. In addition, the GSC felt that assessing a program that will be in competition with their own amounts to a significant conflict of interest, and was hesitant to provide a definitive recommendation in support or against the proposed program.

2. *Do you have any substantive concerns about the proposal that should be communicated to Wright State? How serious, in your view, are these concerns?*

The proposal contains a few minor flaws in terms of organization of the content that were caught by the reviewers. Specifically, a clear distinction in terms of course numbering between

beginning/MS level (possibly, 6000-level), intermediate and advanced level courses appears to be missing. A "candidacy exam" is mentioned in Section 2.1, but not elaborated upon or described anywhere else in the proposal. A major issues that the CSG has identified is the excessive variety of course offering, which seems disproportionately large in relation to the number of faculty. To give an example, the proposal lists ten graduate courses in Control Systems, with only two regular faculty in the control area, plus a lecturer and an emeritus. It is hard to imagine that a course load like the one suggested in the proposal would be sustainable. The impression is that the proposal is trying to oversell the program as far as breath of course offering is concerned. In addition, the GSC was underwhelmed in regard to the content of the listed graduate courses in comparison to the expected standards of a PhD program. As a matter of fact, the syllabi of the 6000-level courses are very similar to our corresponding undergraduate-level courses. The GSC was hesitant to proceed further with this type of evaluation, as they felt that it was not their place to evaluate the quality of the current program at WSU. It seems though that the leap forward that one would expect from a PhD program in terms of advanced courses is not evident from the material submitted for review.

3. *Do you have any suggestions for strengthening the proposal or sharpening its focus?*

Definitely, an effort to differentiate their program from the existing one in the State would improve their chances. Also, a much more precise focus on the specific course offering and how the curriculum has been revised to support the weight of an individual PhD program is deemed essential.

4. *Can/should we be supportive when it comes to CCGS for discussion and vote? If not, what critical point(s) might I highlight at that meeting to make any opposition appear warranted/reasonable/plausible.*

This is clearly a bit of a hairy issue, as the GSC feels that a conflict of interest exists when making such an assessment. The underlying consensus was that, although the GSC did not want to stifle competition or undermine the legitimate aspirations of a newborn program, more effort are perhaps needed on the proposers' part to make the case that such a program is really needed, and how the challenges have been addressed, especially from the course offering standpoint. At this stage, the GSC is not entirely convinced that the proposed offspring from the "PhD in Engineering" is warranted, but did not feel that a strong opposition is completely reasonable either.

My personal view is that a more careful and more informative plan is needed before a decision can be taken, and that considerations of efficient use of state resources must be carefully vetted.
Please, do not hesitate to contact me if the need of more information or comments should arise.