Specific Responses to Committee Charges

Charge 1 - Meet with the DEO of each Department to get their input on issues involving the deployment and use of engineering technologies and services to support the teaching and research missions of the college.

Progress: Prof. Mackey and Mr. Eltoft met with each DEO and Engineering Technology Committee representative to discuss the various computer and other engineering technologies provided by the College. There was general satisfaction with the services provided by Engineering Computer Services and the Engineering Technology Centers in the pursuance of the teaching goals of the College. Through these series of interviews, the variety of systems and services provided to COE departments in support of their academic missions were described to be functioning well and to be well-supported by the pertinent unit. Of note was the recent increase in the number of 3D printers for use by students and the addition of 160 new laptops to the electronic classroom, increasing the count to 240 laptops used in instruction for EPS II and CIE.

It was noted that better communication of the services provided by the Engineering Technology Center might be needed, as MIE has incorporated few of these services into their curriculum and have indicated that they are interested in learning more about what is available.

Charge 2 - Work with College of Engineering Teaching Committee to evaluate the implementation of “spillover classrooms” in the Seamans Center to allow class sections greater than 70 students.

Progress: Committee discussions indicated that setting up spillover classrooms, although technically feasible, might not be the best solution to classroom size limitations. There are many potential issues related to the practicality of such implementation. In general, the overall sentiment is that the use of a spillover classroom would create more problems than it would solve. For example, how would students be assigned to the spillover classroom? What stigma would be associated with being assigned to the alternate classroom? How much time and effort would be spent to allow for interactivity with the lecturer? A pertinent development is that newly revised plans for the new building will result in several larger classrooms. Further explorations with the College Teaching Committee confirmed that the redesign of classrooms in the new addition to Engineering will address most of the concerns driving consideration of the implementation of spillover classrooms. Ultimately, it was decided that further investigation into the development of spillover classrooms was not necessary at this time.
Charge 3 - Work with Engineering Computer Services and the Associate Dean for Graduate Programs to investigate social media and other related tools for graduate student recruiting.

Progress: Professor Mackey met 4 times with Associate Dean Sonka and other COE DGS’s to discuss issues related to improving graduate student recruitment and redesign of the College graduate program’s web pages. The consensus was that most grad programs are not experiencing issues with recruitment this year. Nevertheless, all agreed that the graduate program web sites needed major overhauls, and that the use of social media should be explored further. While most programs in the College are using social media in a passive way in graduate student recruitment, the COE DGS’s and Associate Dean Sonka will continue to explore further options in this area.

This year, graduate application counts are up uniformly across all programs. This upswing in student application is thought to be due to the recent implementation of an electronic grad school application system University-wide. At this point it is unclear if the increased number of applications will translate into increased admissions, as many think that it is just easier to apply using the electronic system. Overall, the new electronic application process is developing into a useful addition to the graduate recruitment process. Our current goal is to improve the look and feel of the College graduate program web pages to provide a better interface with the new application system provided by the Graduate College.

The College DGS group and Associate Dean Sonka decided to implement new web pages using Drupal. The goal is to redesign the pages and allow Graduate Program Coordinators access to those pages specific to their programs. Professor Mackey and Dean Sonka met with Mr. Eltoft to set up the general design of the new web pages. As soon as Mr. Eltoft’s web designer gets time he will implement Dean Sonka and Prof. Mackey’s designs and we will meet again to polish and tune the new site.

Charge 4 - Monitor the process for entering student EFA selections into the computer system. Investigate and recommend a sustainable mechanism for implementing this process.

Progress: This year ITS developers of the MAUI system, led by Mike Noel, continued the addition of important new functionality for use in undergraduate advising in the College. Specifically, EFA/Track Plans of Study are now electronically available on MAUI. An electronic advising note system has been implemented and a new set of pages related to advising have been added to the MAUI web application to make it easier to use the tool in pre-registration advising of undergraduates. It is now easier to access and keep track of changes in Plans of Study and other information associated with a student’s academic progress.
through the various curricula in the College. By this Fall it is expected that MAUI will enforce course prerequisite dependencies during registration, a process that has been a long time coming. Challenges remain in the areas of electronic plan of study submission and the incorporation of departmental approval of study plans using the workflow system. The goal is to shorten the time for processing Plans of Study to better monitor student degree progress and to alleviate problems associated with erroneous and incomplete plans of study that can persist up until student graduation. Given the curricular complexities of the programs in Engineering, these have always been difficult problems. Although the system is still not perfect, significant progress has been made and more is on the horizon. The Engineering Technology Committee should continue to monitor these developments.

Charge 5 – Specific charges for the 2015-2016 Engineering Technology Committee

1. Meet with the DEO of each Department to get their input on issues involving the deployment and use of engineering technologies and services to support the teaching and research missions of the college. Report the results of these meetings and discussions back to the EFC.

2. Work with the Engineering Technology Centers to increase College-wide awareness of the services provided to the Departments in COE in support of their academic and research missions.

3. Work with Engineering Computer Services and the Associate Dean for Graduate Programs to continue improvements in graduate program web site design and investigate further the use of social media in such design, with the ultimate goal being to support graduate student recruitment and improve the quality of graduate programs.

3. Monitor continuing progress for electronic processing of undergraduate Plans of Study, including automation of EFA/Track selection and processing of curriculum for the degree audit subsystem in MAUI.