BOV
Telecommunications and Networking Program Update
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General Update
*Student body remains predominately international (mostly India and China) - slight increase in enrollment and quality.*
*Increase in number of internships both for credit and not for credit.*
*High placement rate of Spring 2015 graduates.*


1. How is your program approaching collaboration across the University?

   *The TeleNet program has an established on-going set of collaborations across the university. In the curriculum MST students take required courses in other departments (CS, Katz) and can take advantage of a set of preapproved electives from CS, ECE, and KATZ and other courses are possible with advisor approval. At the Ph.D. level students course selection is tailored to the students research area with students taking a range of courses outside the school such as Economics, GSPIA, ECE, IE, CS and EPP at CMU. At the curriculum level collaboration is done through the faculty in program meetings.*

   *In terms of research, TeleNet faculty have on-going and past collaborations with the Center of Energy in SSoE, University Center for Social and Urban Research (UCSUR), SEI/CERT and faculty in CS, ECE, and IE. At the research level, currently collaboration is initiated through individual or group faculty contacts and interests rather than an organized fashion.*

2. How might such collaborations advance or impede the interests of your faculty and students?

   *Collaborations are viewed as enhancing faculty research and providing additional avenues for funding, raising the profile of the school and enabling educational opportunities. The downside is the time taken away from other programmatic tasks. Another difficulty is fostering and initiating the collaborations – for example many NSF grant proposals now require a team including an SBE member*

3. How do you envision your program evolving over the next 5 years?

   *The degree program would be housed in a broader department in the new school – for example a department of cyberinfrastructure containing expertise in database, cloud computing, cybersecurity, data archiving, cyberinfrastructure policy, and other areas in addition to networking.*

*Furthermore, with the new school there are numerous see opportunities for growth in terms of students in our courses, revising/expanding the curriculum, offering new joint degrees (e.g., M.S. Cybersecurity, B.S. Telecom engineering with SSoE) and interdisciplinary research. I envision the program focusing on new areas within networking (SDN, NFV, datacenter networks, 5G wireless, spectrum virtualization), cyberinfrastructures (cloud computing, data center networks), cybersecurity (science of security, XDDOS, insider threats, etc.) and interdisciplinary areas (e.g., cyberphysical systems – e.g. smart power grid; contextual cyberinfrastructure for healthcare/smart cities/k-16 education).*

4. What are the most significant challenges that will need to be addressed?

*Faculty size, staff support, breaking down barriers or providing incentives to potential collaborators outside the school, recruiting domestic students at the graduate level.*