**BS in Computer Engineering**

**Explanation of Academic Program Costs/Revenues Template**

**Headcount Enrollment:** The estimated enrollment is based on a total Electrical Engineering (EE) undergraduate enrollment of 250, which was the average EE enrollment. The number of students in the "Computer Track", i.e., specialized in computers, was about a third of the total EE students. The department estimates that the total computer engineering undergraduates will be 250/3. Assuming that students will graduate in four years, we estimate that the number of computer engineering students at the freshman, sophomore, junior, and senior levels will each be 250/(3*4) = 21. The number of EE credit hours for freshman is 4, sophomores is 13, juniors is 25, and seniors is 21 based on our EE curriculum. We assume that the program will begin Fall 2010 and that 21 students will enter the program each year. So in the first year, there will be 21 freshman; the second year there will be 21 freshman and 21 sophomores for a total of 42 students; the third year there will be 21 freshman, sophomores, and juniors for a total of 63 students; and so on.

**Faculty/Instructor Salaries:** No additional faculty or resources are requested to implement the computer engineering Bachelor of Science degree program. We provide the salaries and fringe benefits of existing EE faculty who are currently teaching computer courses (50% of their salaries are included, which is a fair estimate of the amount of time they will spend on the undergraduate program). They are Tep Dobry, Ying-Fei Dong, Anna Hac, Luca Macchiarulo, Galen Sasaki, and David Y.Y. Yun. It should be noted that Tep Dobry serves in the College of Engineering Dean's Office as the Undergraduate Advisor, so he is counted as 50% FTE for the undergraduate computer engineering program. The other faculty teach between two and three undergraduate courses per year, with the exception of Luca Macchiarulo. Their fraction of time on the undergraduate program is 3/8. The rest of their time is spent on service, teaching graduate courses, graduate advising, and research. Luca Macchiarulo is half time in the computer area (the other half in electro-physics area), so his fraction of time is 3/16. All salaries were based on the expected on August 1, 2008 and no raises thereafter.

**Other Personnel Costs:** There are two office staff and two technical staff. In the case of the office staff, the department estimates that they spend half their time on the undergraduate program, of which one-third is the computer track. The time spent on computer track is 1/6. In the case of the technical staff, the department estimates that they spend most of their time on the undergraduate program, of which one-third is the computer track. The time spent on computer track is 1/3.

**Unique Program Costs:** The department estimated the amount of computer and lab equipment costs needed per year for the Electrical Engineering Department, divided by 4.

**As per the instructions, the department added the 4% increase for inflation for faculty/instructor salaries (C), other personnel costs (D), and unique program costs (E). Note that after the first year, there is no increase in tuition.**
Other Revenue: The lab fee of $1000/year per student, excluding freshman, is included. So in a steady state, per year, this amount is $1000 * (# students) * 75%, since 75% students are assumed to be sophomores, juniors, or seniors.

Comparable Program Costs: The BS in Computer Science (College of Natural Sciences)