

## **Engineering Student Technology Committee, Charges for Technology Proposal**

Submitted by the following professors at the Engineering Research Center (ERC):

### Civil Engineering

Dr. Chris Thornton, Director, Engineering Research Center

Dr. John van de Lindt

### Electrical Engineering

Dr. Carmen Menoni

Dr. Jorge Rocca

### Mechanical Engineering

Dr. John Williams

Dr. Azer Yalin

Undergraduates are becoming more involved in research and senior design projects at the ERC, much of which is interdisciplinary in nature. We propose that a design studio/conference room be created through use of Charges for Technology funding to facilitate undergraduate participation. Potential sites for the studio have been identified by the ERC Director, Chris Thornton. To be effective at research and to engineer their senior design projects, students need access to personal computers to analyze data, run simulations, design parts for fabrication in the ERC shop, and to create presentations and papers that document their work. They also need a space to come together where they can discuss projects and ideas around a table and work on presentations. As shown by the variety of engineering departments represented in this submission, the space would be used by students in all engineering departments, graduate and undergraduate alike. Specifically, this request is for duplicating one of the design studios in the Magellan Lab. We propose that the ERC design studio include 4 PCs with recurring funding for tech support each year, and a conference table and chairs, large enough to accommodate 8 people. A projector and smart board would be needed to allow for presentation practice, design brainstorming, and other group related interactions.

Currently, an electronic classroom, A210, exists at the ERC. This classroom may be reserved for classes and seminars. During these times, students have no access to this space. This room does not contain a conference table and is thus unsuitable for students to work together on projects, presentations, etc. A common-use printer is also located in the electronic classroom. It is suggested that the proposed design studio would give a new location for this printer, thereby preventing the interruption of classes and seminars by those who unknowingly enter and disturb the occupants of the classroom to retrieve printed material.

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Dear Dr. Thornton

Subject: Response to Request for Interdepartmental Funding

The Engineering Student Technology Committee (ESTC) considered several requests for interdepartmental funding at our meeting on May 8. It was understood that your request was for the ESTC to permanently fund equipment for a design studio at the Engineering Research Center (ERC). Due to the policies governing the Charge for Technology (CFT), the ESTC is limited in terms of what it can purchase. In particular, the CFT manual limits the amount of funds that can be spent on furniture and renovations.

Mark Ritschard of Engineering Network Services (ENS) estimated that the design studio would cost approximately \$31,500 to implement as follows. This estimate does not include room renovations such as carpet, paint, doors, etc.

Equipment:

Six computers: \$7,800  
Six monitors: \$1,320  
1 digital sender: \$2,850  
1 projector: \$2,800  
1 projector mount: \$500  
1 electrical projection screen: \$800

Furnishings:

6 computer desks: \$3,000  
12 chairs: \$3,600  
1 conference table: \$1,500  
1 table top flip-up jack: \$750

Infrastructure:

8 network jacks: \$3,200 (six computers, 1 table jack, 1 projector)

floor pocket for table cabling: \$2,000

wiring and conduit: \$500

installation of projection screen: \$800

Based on the CFT policies, the committee has agreed to provide \$25,000 to create an ERC design studio so long as the college agrees to provide the balance of approximately \$6,500. In addition, the ESTC agreed to fund the replacement of the equipment listed above. This cost is approximately \$4,000 annually. Before the funds are made available, the ESTC also requires the college to adequately provide and/or prepare the space for the design studio. Items would include carpet, appropriate lighting, adequate ventilation, and painting and repairs as necessary.

Please coordinate the implementation of the design studio with Mark Ritschard, Director of ENS. Both he and Dan Herrick, ENS Computer Lab Manager, will be available to assist in planning and preparation along with coordination of purchases and work orders. The funds for this project will be available through the end of fiscal year 2010. If not utilized by June 30, 2010, the funds will revert to the ESTC.

Sincerely

A handwritten signature in blue ink, appearing to read 'BR', is centered within a light blue rectangular box.

Brad Reichel  
Engineering Student Technology Committee Chair