



A Proposal for

***Implementation of a
School of Engineering
“Engineering Fee”***

Submitted to:

Office of the Provost
250 Strong Hall
The University of Kansas

The School of Engineering
Learned Hall
(785) 864-2930 (voice)
(785) 864-5445 (fax)
sbell@ku.edu

Implementation of the The School of Engineering Engineering Fee

I. Recommended Fee

A \$15/credit hour fee to be paid by all students enrolled in an engineering course for supporting programs in the School of Engineering is proposed. The justification of the additional \$15/hr engineering fee is discussed below. The goal of the proposed fee is to provide needed resources to maintain the undergraduate and graduate programs of the School of Engineering at the University of Kansas. The fee would be implemented in fall 2004 and would be adjusted annually with the higher education index.

The proposed \$15/credit hour will impact the school by providing support for:

- Technology enhancement and student program support, and
- Faculty support.

II. Justification of the Fee

This section responds to the three major criteria of the Board of Regents' Task Force on tuition and special fees for the Regents' universities. These responses are listed as a) through c) below.

- a) The funding need is compelling, as evidenced by a long history of chronic under funding and external validation that such under funding adversely impacts the quality of the program.**

By its very nature, engineering is technology oriented (hardware and software) and has a goal of developing useable technology for industry. In the last five years, technology has been advancing at incredible rates leading to stiff challenges of providing relevant and cutting-edge educational experiences in an academic setting. This is particularly true in the engineering laboratory experiences for undergraduate and graduate students. While the current engineering equipment fee was able to meet this need when it was adopted some 10 years ago, it has not been increased since its adoption. The increasing needs of providing relevant technology experiences for engineering students at KU have grown while this fee remained fixed. Thus the current equipment fee is not adequate for meeting current and the envisioned future needs in the School of Engineering. The proposed new fee will provide the additional resources required to meet the technology needs in the school of engineering.

The ability to attract top-ranked undergraduate students is directly impacted by our facilities. Recruiting of top-ranked high school students continues to be more competitive. As students and their parents visit the KU campus, impressions of the school's facilities and general appearance are extremely important.

The fee will provide needed support for career services for our students. Having a strong career placement service available to our students is important and additional resources will provide increased services to the students in this area.

The proposed fee will support students by providing additional resources for placing and maintaining the latest technology in laboratories and classrooms and providing resources for supporting student activities such as design competitions and student group activities.

Table I below provides a summary of engineering fees charged by a number of the Big 12 universities (data was taken from web sources and conversations with other institutions). Data for Nebraska, Colorado and Texas Tech were not available and Baylor, being a private institution was not included. In the past it was reported that Nebraska receives direct state line funding for equipment and technology needs in engineering.

Table I. Engineering Fees
at Other Institutions

School	Fee	Purpose of Fee	Total School Est. for 4 yrs from Fees ¹
University of Texas	\$100/semester	Costs of advising	\$4320
	\$50/semester	Costs of providing placement services	
	\$150/semester ²	Costs of providing learning resource centers	
	\$10/credit hr	Non-computer equipment	
	\$32/credit hr	Computer equipment & staff support	
Texas A&M	\$14/credit hr	Computer fee	\$2440 ⁴
	\$70/course	Equipment access fee (limited to \$200/sem)	
University of Missouri	\$42.60/credit hr	Engineering supplemental fee	\$2556
Iowa State	\$193/semester	Computer fee	\$1544
Kansas State	\$15/credit hour	Engineering equipment	\$1800
	\$15/credit hour ³	Engineering fee	
University of Oklahoma ⁵	\$18/credit hr	Engineering fee	\$1080
Oklahoma State	\$19/credit hr	Engineering fee	\$1140
Average for above Schools			\$2125
University of Kansas	\$15/credit hr	Engineering equipment fee	\$900 (current)
(proposed new fee)	w/ \$15/credit hr	Engineering fee	\$1800 (proposed)

- 1 Total estimate is calculated by summing the semester charges for eight semesters plus the per credit fees for 60 hours of engineering designated courses.
- 2 This cost varies slightly by engineering discipline with \$150/semester being an average
- 3 A \$5/hr fee was adopted in 2002, plans are to increase to \$10/hr in 2003 and to \$15/hr in 2004
- 4 Includes eight semesters of the equipment access fee at \$200/semester
- 5 An additional fee is being proposed for FY04 but details are not available

As shown in Table I, all engineering programs looked at are providing a greater level of fee support to their programs. In Missouri for example, the \$42.60 per credit hour fee provides approximately \$2556 per student additional resources to engineering over the four years a student would be at the university. In comparison, the current fee structure at KU provides about \$900 over the same four-year period. The estimated average income for a four-year period per student for all the schools included in the table was just over \$2100. The proposed

\$15/credit hour fee at KU would bring KU engineering to the same point as KSU, \$1800, but still below the \$2100 average figure. As shown in the table footnote, KSU has already begun implementing a planned \$15/hr engineering fee (fall 02 - \$5/hr, fall 03 - \$10/hr, and fall 04 - \$15/hr).

The proposed KU fee will directly support faculty by providing resources for developing new and improved laboratory facilities used by faculty and improvements and innovations in classrooms. The long-term success of maintaining a first-tier engineering program largely depends on the ability to attract and support top-ranked faculty. The success of faculty impacts the quality of a program in several ways including the level of national prominence attained by school, the ability to attract high-quality students, the ability to provide strong educational programs for students, the ability to build nationally recognized research programs, and the ability to establish partnerships with external agencies including federal laboratories, peer universities and industry. Table II shows how faculty salaries at KU compare with Big 12 and AAU engineering programs. As shown we are below the average peer salaries in both groups, an issue that if not addressed will lead to deterioration of the quality of our programs. While the resources in this proposal will not directly address the salary deficit, they will provide related faculty support that will help faculty development.

Table II. Faculty Salary Comparisons for Engineering
FY 2002

	Big 12	AAU-14
KU Engineering Salaries as a % of Peer Salary)	94.1	89.5

b) All other external and internal sources of funding, including internal reallocation, have been exhausted.

When one considers that KU is currently under funded among its peers and has taken a number of budget reductions, it is very difficult for the central administration to reallocate significant amounts of money to one program over another. For example, suggestions that KU could solve the engineering needs by reallocating OOE funds among units of the university are unreasonable, as evidenced by the fact that the University-wide OOE budget is at 51.9% of its peers funding. Additionally, KU's overall budget is 74.7% of its peers funding, clearly demonstrating that reallocation from other sectors of the University would be devastating to those programs.

c) Failure to authorize the fee will jeopardize the validity of the program.

The Accreditation Board for Engineering and Technology (ABET) has a strong position on providing adequate support for engineering programs as reflected in the accreditation criteria. Under *Criterion 6 Facilities* ABET states, "Classrooms, laboratories and associated

equipment must be adequate to accomplish the program objectives and provide an atmosphere conducive to learning... Programs must provide opportunities for students to learn the use of modern engineering tools... Computing and information infrastructures must be in place to support the scholarly activities of the students and faculty..."

Also, as noted by ABET under *Criterion 5 Faculty*, "The faculty is the heart of an educational program..." and thus there must be adequate resources to support the faculty. If faculty support resources are not addressed we risk the loss of our strongest faculty and a reduction in productivity. The proposed fee will provide additional faculty support resources.

III. Number of Students Affected by the Fee

Table III summarizes twentieth-day enrollment statistics for last fall semester.

Table III. KU School of Engineering Enrollments

KU SoE	Full-time	Part-time	Total
Undergraduate Students	1350	150	1500
Graduate Students	250	450	700

IV. Impact of the Proposed Fee

The additional engineering fee will add on average about 6% to a student's total tuition and required fees. The fee would generate approximately \$425,000 per year at KU for the School of Engineering. The fee would be used to provide support for the areas discussed in this proposal.