

Engineering Student Technology Committee Minutes

Meeting of April 13, 2004 in the Engineering Conference Room

-Present: David Bryant (ME), Bryce Eldridge (ECE), Todd Ellis (Atmos), Ryan Fleming (CE), Tim Hinerman (ME), Doug Hopper (ME), Shawn Klawitter (ChemE), Miranda Grote (intra), Liz Lipp (intra), Dave Miller (ChemE), Mark Ritschard (ENS), Matt Rogers (Atmos), Prof. Hiroshi Sakurai (ME),

-Absent: Klaus Hartinger (ECE), Derek Johnson (ChemE), Prof. Kevin Lear (ECE), Arun Nair (CE), Prof. Steve Rutledge (Atmos), Heidi Shray (ECE), Assoc. Dean Tom Siller (Acad. Affairs), Prof. Ranil Wickramasinghe (ChemE), Tony Zancanella (CE), *open faculty position* (CE)

-Welcome and Introductions

Dr. Kirkpatrick was introduced to the committee. Dr. Kirkpatrick attended the meeting to explain a proposal for the ME department.

-Updates

None

-Previous Meetings Minutes

Meeting minutes from 3/30/04 were modified in order to adequately explain the technology fee increase that was passed at that meeting. The minutes are to be changed and ratified by the committee at the next meeting (April 27, 2004) before being accepted. All other meeting minutes for the semester were reviewed by the committee and accepted.

-Budget Items

A copy of the budget reflecting changes made at the last meeting was provided for each member (attached).

-Student Wages

ENS had expressed a desire to have the student wages increased by \$2,000. Ritschard relayed this desire to the committee. The student wage increase was requested to cover the mandatory state increase in student wages each summer. The increase would deduct \$2,000 from the strategic initiatives, and increase student wages for the year from \$68,000 to \$70,000. The strategic initiatives allocation would decrease from \$33,000 to \$31,000. Grote motioned to accept the increase, the motion was seconded and passed unanimously.

-Equipment Replacement

A list of 8 proposed changes was presented to the committee. The proposed changes were all of those that have been suggested to the committee throughout this year. The 8 proposed changes included the following:

1. Increase each PC price by \$200 (from \$1300 to \$1500). The increased price would include upgrades (e.g. increase FSB to 800Mhz, RAM to 2GB, and video card to nice gaming card). Cost: \$5.7K
2. Change all 19" Trinitron to flat panel. Cost: \$10K
3. Change all LMDS monitors to 21". Cost: \$1.3K
4. Reduce Thin Client life cycle to 4 yrs. (currently on 5 yr. Cycle). Cost: \$2.2K
5. Install 2' flat panels in design studio. Cost: \$15K
6. Increase loaners to 6 laptops and 3 projectors. Cost: \$1.4K
7. Reduce printer life cycles to 4 years. Cost: \$1K

8. Upgrade 8 Café thin clients to PC's. Cost: \$4K

The committee discussed each item and a vote was taken on each. The following table shows the results:

<i>Proposal</i>	<i>In Favor</i>	<i>Opposed</i>	<i>Abstained</i>	<i>Result</i>
1	7	3	3	Pass
2	0	10	3	Fail
3	11	1	1	Pass
4	10	2	1	Pass
5	0	13	0	Fail
6	12	0	1	Pass
7	12	0	1	Pass
8	1	11	1	Fail

Hinerman motioned to accept the equipment replacement changes that received a passing vote as shown in the table. That is, the committee as a whole would accept proposals 1, 3, 4, 6, and 7. The result of the motion would deduct a total of \$11.6K from strategic initiatives to fund the changes. The motion was seconded and passed by a unanimous vote. Based on the \$11.6K that was approved for the proposals, \$11K was added to the Computing Equipment Replacement Budget and reduced from Strategic Initiatives. Ritschard felt that annual prices savings would likely cover the \$600 not added to the budget.

-Strategic Initiatives Proposals

Dr. Kirkpatrick was given the opportunity to present the Mechanical Engineering Departments proposal for a metric lathe (attached). The committee expressed an interest in revisiting the biomedical proposal, as well as a new proposal to be presented by Hinerman regarding computers in the Thermo/Fluids lab and Smash Lab. A motion was made, and seconded to table all strategic initiative proposals until the next meeting. The committee agreed to table discussions.

- Chair of the Committee

Klawitter was thanked for his excellent work as the chair of this year's committee and Fleming accepted the nomination to serve as chair next year. No other nominations were received. While Fleming was excused from the room, the committee elected him to serve as next year's chair.

-Next Meeting

The next meeting will be Tuesday, April 27, at 8AM in the Engineering Conference Room.

Submitted by:
Ryan C. Fleming

Charges for Technology

College of Engineering

Budget Planning for Fiscal Year 2005

	FY04	FY05
Assistive Technology	\$2,000	\$2,000
Business Expenses	\$3,000	\$3,000
Central Services & Systems	\$294,000	\$303,000
Computer Lab Equip. Replacement	\$135,000	\$138,000
Laboratory Maintenance	\$20,000	\$23,000
Network Maintenance	\$4,000	\$4,000
Server Maintenance & Support	\$70,000	\$70,000
Student Wages	\$65,000	\$68,000
Department Allocations	\$122,000	\$131,000
Atmospheric Science	\$21,000	\$21,000
Chemical Engineering	\$12,800	\$19,900
Civil Engineering	\$32,700	\$30,000
Electrical & Computer Engineering	\$16,600	\$16,800
Intra-departmental majors	\$3,000	\$5,000
Mechanical Engineering	\$35,900	\$38,300
Scholarships	\$55,000	\$53,000
Strategic Initiatives	\$44,000	\$33,000
Compute Power	\$5,000	
EECL Computer Lab	\$10,000	
Graduate Citrix Farm	\$5,000	
Other	\$26,000	
	Budget: \$520,000	\$525,000
Actual/Projected Tech Charge Revenue	\$511,632	\$525,000

Charges for Technology

College of Engineering

Budget Planning for Fiscal Year 2005
inventory accurate as of spring, 2004

Actual Lab Equipment	computers		graphics workstations		thin clients		19" flat panel		21" Trinitron		19" Trinitron		B/W laser printer		Color laser printer		Equip. Value	Avg. life cycle	Annual 4yr Repl. Cost
AERC	5	0	0	5	0	0	0	0	0	0	5	5	2	1	1	1	33,500	5	6,700
Allison Hall	1	1	0	0	4	4	0	0	0	0	5	5	0	0	0	0	6,400	4	1,455
Anderson Lab	78	61	0	0	3	20	0	0	0	0	83	81	3	3	0	0	133,150	4	32,198
Design Studio	0	30	42	12	1	1	0	0	42	0	1	43	2	2	1	1	159,800	4	36,994
Technical Shop	4	4	0	0	0	0	1	1	3	0	1	4	0	0	0	0	6,950	4	1,738
Electronic Classroom	0	0	25	24	10	0	0	0	35	0	0	24	1	1	0	0	132,500	5	26,606
ERC lab	3	10	0	0	7	10	0	0	0	0	10	20	1	1	0	0	34,900	4	8,156
GIS lab	21	21	0	0	0	0	0	0	21	21	0	0	1	1	1	1	47,600	4	11,769
Internet Café	1	1	0	0	25	25	25	25	0	0	1	1	1	1	0	0	44,850	4	10,027
Loaner pool	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,800	4	2,700
	117	132	67	41	50	60	26	26	101	21	106	183	11	10	3	3	610,450	4.4	138,344

	Cost	life cycle	
computer	1,300	1,500	4 example: would increase FSB to 800Mhz, RAM to 2GB, and video card to nice gaming card
graphics workstation	5,000		6
thin-client	900		5 (all costs included: dual server (UNIX & Win) support and all licenses)
19" flat panel display	550		4
21" Trinitron monitor	500		4
19" Trinitron monitor	300		4
black & white laser printer	2,500		5 as approved last week--> 138,300
color laser printer	4,500		5 change average cost as noted in blue--> 144,000 +5.7K
36" color plotter	8,000		5 change all 19" Trinitron to flat-panel--> 148,300 +10K
60" color plotter	14,000		5 change all LMDS monitors to 21" --> 139,600 +1.3K
regular scanner	250		4 reduce thin client life cycle to 4 yrs --> 140,500 +2.2K
large-format scanner	1,600		4 install 2' flat-panels in design studio --> 153,300 +15K
photo scanner	200		4 increase loaners to 6 laptops and 3 proj's --> 139,700 +1.4K
digital sender	1,700		4 reduce printer life cycles to 4 years --> 139,300 +1K
projector	2,800		4 upgrade 8 Cafe thin clients to PC's --> 142,300 +4K
plasma display	13,000		5
smart board	1,600		5



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April 2, 2004

MEMORANDUM

To: Mark Ritschard
From: Dr. Allan Kirkpatrick, Professor and Head
Re: Proposal for matching funds for equipment

I am writing to formally request the use of College Technology Resource Fees for matching the purchase of a metric lathe for the Manufacturing Instructional Laboratory (MIL) in B-9 Engineering. The MIL is an instructional and practice laboratory used to support scheduled classes and laboratory sessions for experiential undergraduate learning in the Department of Mechanical Engineering. Students receive for formal instruction in the required course ME 121 Mechanical Engineering Shop Practicum, and work on projects for other sophomore, junior, and senior ME design projects in the laboratory.

The MIL is the only shop in the College of Engineering, so it is the only resource for hands-on project work for the College. Therefore, it is also home to project work in other departments. All engineering students are welcome to use the shop, and certification classes are held to certify students to work in the shop on their projects. For example, it is used by Civil Engineering senior design students, as well as ECE and Chemical Engineering students projects.

With the adoption of experiential learning by the engineering departments, the student use of the shop has increased from about 30 student-hours/wk to about 400 student-hours/wk in the last three years. In Spring 2004, at any given hour, there are an average of ten students in the shop working on their projects. There is a need for additional equipment such as metal lathes. Specifically, with the increased use of metric components, there is a strong need for metric equipment, specifically a metric lathe. The shop instructor, Dr. Steve Schaefer, in conjunction with the purchasing department, has received competitive bids for a metric lathe, so the cost of the specified lathe will be \$5400.

The Mechanical Engineering Department will contribute \$2700 from the Department's Technology Resource Fee to the purchase of the metric lathe. Since the MIL is also a college resource, we would like to request \$2700 matching funds from the College Technology Resource Fee Fund as well.