Engineering Student Technology Committee

Meeting minutes for April 26, 2000 - Engineering B214 Conference Room - 8:00am

Present: Torrey Burgess (ME), Megan Donovan (ECE), Jennifer Flint (ECE),
Prof. Garcia (CBE), Mike Holland (ME), Prof. Labadie (CE),
Sarah Legoza (CBE), Prof. Nassar (ECE), Lance Parker (CBE),
Jenny Po (intra), Mark Ritschard (ENS), Jessica Rupp (ME),
Dan Stiles (CE), Prof. Willson (ME)

Absent: Michelle Heintz (CE), Bala Natarajan (ECE), Laurent Simon (CBE),
Marcel Zibognon (CE)

- Corrections to previous meeting minutes (4-5-00, 4-12-00, 4-19-00)
 none
- Printing quotas

Stiles moved that a print quota system be instituted per the discretion of ENS. Parker seconded the motion, on the condition that color printing be offered when the system is instituted. The motion passed 12-2 with Burgess and Holland dissenting.

- Proposals: Priortization & Approvals

Ritschard distributed a summary of the rankings submitted by the committee, with the proposals ranked 1-15 by the average rank of the 14 submitted rankings. It was noted that the trim mean and the second trim mean only slightly changed the rankings.

Discussion then focused around the ranking of the requests. However, the ranking was not changed before discussion moved to actual funding of requests.

During the discussion of funding, Parker moved and Stiles seconded, that the Glover Lab project be partially funded at 15K. The motion passed 10-4 with Burgess, Garcia, Legoza, and Po dissenting. Ritschard moved that FLUENT not be funded, but no one seconded the motion.

The following requests were funded, with ranking noted in parentheses:

- (1) Web server full funding unanimous
 (2) Quota software full funding unanimous
- (3) Sun Rays full funding unanimous unanimous
- (4) Glover lab partial 15K unanimous (7) FLUENT software full funding unanimous

After some discussion regarding funding of departmental labs, it was noted that the request form stated that requests with cross-departmental support were to be given preference but that the committee also had discussed funding departmental projects that were strategic but carried a larger cost. There was no consensus on how these two ideas should be balanced.

It was also noted that, at least in the case of ECE and CBE lab requests, the departmental labs are open to all students when not in use for classes. Because it is not generally known that these labs are open access,

Ritschard agreed to ask ENS to post a list of general access computing labs both on the doors of all the labs and on the ENS web page.

Garcia then moved and Burgess seconded that the three departmental lab requests be funded at the percentage of the remaining funds (\$47,980) vs. the total of the requests (\$60,575): approximately 80\$. The motion passed 11-3 with Labadie, Ritschard, and Stiles dissenting. As a result the following requests were partially funded, with ranking noted in parentheses:

(5) Glover 146 lab \$12,673

(6) ECE Lab upgrades \$8,376 (8) ME lab computers \$26,931

The remaining requests were left ranked as follows, should funding become available (not likely):

- (9) CES Software
- (10) FIDAP Software
- (11) ECE Card Readers
- (12) Wireless Simulation Software
- (13) ECE Semiconductor Analyzer
- (14) NSF Thermo Cost Share
- (15) Digital Imaging

Discussion will continue next week with departmental requests.

Submitted by Mark Ritschard

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"He is no fool, who gives what he cannot keep, to gain what he cannot lose."
- James Elliott

Committee Member:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Average	Trim Mean	Trim Mean (2)
Web Server	5	4	2	1	2	2	3	7	4	1	10	1	2	2					3.29	2.92	2.70
Printer quota software	1	1	4	13	5	1	5	1	8	3	15	4	4	1					4.71	4.17	3.60
Sun Rays	12	6	1	3	7	11	1	5	3	4	9	5	3	3					5.21	5.00	4.80
Glover Lab upgrades	9	8	3	10	1	15	2	3	2	2	11	2	1	5					5.29	4.83	4.60
Glover 146 Lab Upgrades	15	7	5	7	9	9	6	2	7	8	4	3	5	8					6.79	6.50	6.82
ECE Lab Upgrades	7	2	11	4	15	10	6	4	5	6	6	11	7	9					7.36	7.1 <i>7</i>	7.10
FLUENT Software	2	12	8	12	6	4	12	15	6	7	7	9	8	7					8.21	8.17	8.20
ME Lab Computers	10	5	6	6	13	8	6	6	1	11	12	13	6	15					8.43	8.50	8.40
CES Software	8	9	7	11	8	6	4	8	11	5	13	8	14	6					8.43	8.33	8.20
FIDAP Software	3	11	14	9	4	3	11	13	13	14	3	15	9	12					9.57	<i>9.75</i>	9.90
ECE Card Readers	4	13	9	2	11	14	14	12	14	9	14	7	11	4					9.86	10.17	10.40
Wireless Simulation Software	6	10	12	8	12	13	13	11	9	10	5	10	10	11					10.00	10.17	10.30
ECE Semiconductor Analyzer	11	3	15	5	14	7	15	9	10	12	8	12	12	14					10.50	10.75	10.90
NSF Thermo Cost Share	14	14	10	14	3	5	9	14	15	15	2	14	13	10					10.86	11.25	11.50
Digital Imaging	13	15	13	15	10	12	10	10	12	13	1	6	15	13					11.29	11.83	12.10

	Rank	Cost	Modified Cost	Running Total	fund?
Web Server	1	\$5,920	\$5,709	\$5,709	yes
Printer quota software	2	\$2,500	\$2,500	\$8,209	yes
Sun Rays	3	\$13,000	\$12,536	\$20,744	yes
Glover Lab upgrades	4	\$30,000	\$27,321	\$48,066	yes
Glover 146 Lab Upgrades	5	\$16,000	\$13,433	\$61,499	yes
ECE Lab Upgrades	6	\$10,575	\$9,817	\$71,316	yes
FLUENT Software	7	\$2,000	\$2,000	\$73,316	yes
ME Lab Computers	8	\$34,000	\$24,245	\$97,561	\$13,085
CES Software	9	\$3,565	\$3,565	\$101,126	no
FIDAP Software	10	\$2,000	\$2,000	\$103,126	no
ECE Card Readers	11	\$3,000	\$3,000	\$106,126	no
Wireless Simulation Software	12	\$2,795	\$2,795	\$108,921	no
ECE Semiconductor Analyzer	13	\$33,000	\$29,000	\$137,921	no
NSF Thermo Cost Share	14	\$20,000	\$19,286	\$157,206	no
Digital Imaging	15	\$9,000	\$8,714	\$165,921	no

Comments

Continents
Needed upgrade (1), needed but could wait a "year" (1), fund half (1)
Supports strategy agreed to by committee (1)
Strategic need for undergrad UNIX machines? Didn't we get new UNIX machines f/ HP? (1), highly
applicable to fee (1), fund half (1)
fund half (2), No ENS support, upgrades already slated (1), fund 15 computers for \$22,500
fund half (1), fund 5.96K - prorated share of \$40K - Departmental upgrade (1), share funds equal parts to
EE ME and CBE since they're all for the similar things (1), how about funding 5 for \$10,000 and allocating
remaining CBE funds here as well (1), fund 60% (1)
fund half (1), fund 9.48K - Prorated share of \$40K (1), share funds equal parts to EE ME and CBE since
they're all for the similar things (1), sensible upgrades to existing systems (1), fund 60% (1)
Multidepartmental, highly leveraged (1), non-critical, probably better funded through other means (1)
fund half (1), fund 5 (1), Fund 12.2K - Prorated share of \$40K - Departmental upgrade (1), share funds
equal parts to EE ME and CBE since they're all for the similar things (1), fund 10 for \$20,000 (1), fund 60%
(1)
Multidepartmental
Multidepartmental, highly leveraged (1), non-critical software for ME and ECE students, ME and CE have
many other more applicable proposals (1)
Non-strategic maintenance item, best for departmental expenditure (1), departmental infrastructure (1)
Best for departmental expenditure (1), telecommunications specific (1)
fund half (2), Capital acquisition, replacement equipment so non-strategic. Provide partial funding of 10K
(1), non-critical but sensible technology (1)
Leveraged cost share, new capabilities so strategic (1), Fund 10K (1), great project but not applicable to this
fund? (1)
Best for departmental expenditure, mostly affects grad classes (1), fund 5K (1), non-critical new lab, how
about funding matlab tool box for 1K (1)

Engineering Student Technology Committee

College of Engineering

Colorado State University

Charges for Technology Proposals, 1999-2000

Proposals against central funding (listed in the order received)

- Purchase of FIDAP Computational Software: Meroney, et al
- Wireless Communication Channel Modeling: Nassar
- Card Reader Locks for Rooms B109, C105, C107, and C207: Lile & Aurand
- Computer Upgrades in the Systems and Electronics Laboratories: Lile & Aurand
- H.P. Semiconductor Parameter Analyzer: Lile, et al
- Lab Proctor Support: Lile & Aurand
- College of Engineering Web Server Replacement: Keist, et al
- Modernization of the Glover Computer Lab: Young, et al
- o Computer for Moments Magazine: Young, et al
- Request for replacement computer: Legoza & Whitt
- Computer Infusion to Instruction Labs: Tong
- Cost Share for NSF Equipment Grant for the Thermofluids Lab: Tong & Grigg
- Thirty additional seats of Camgridge Engineering Selector software for the Lockheed-Martin Engineering Design Studio: Fitzhorn, Siller, & Jayasumana
- 20 seat FLUENT CFD software license for the Lockheed-Martin Engineering Design Studior Fitzhorn, Meroney, & Smith
- <u>Hardware upgrades for Glover 146c Undergraduate Computing Laboratory</u>: **Gonzales & Murphy**
- Digital Image Processing Systems: Azimi, Jayasumana, & James
- Dynamic and Steady State Simulation using HYSIS: Karim & Murphy
- Print Quota Software: Ritschard, Mapel, & Van Noy
- Sun Ray facility: Ritschard, et al

Proposals against departmental funding (listed in the order received) Chemical and Bioresource Engineering

- Simulation and Design of Biological Processes using Superpro Designer: Karim & Murphy
- Omnistar I year satellite subscription for GPS differential correction: Garcia & Ayers
- <u>Hardware Upgrades for Dept. Chem. & Bio. Eng. Undergraduate Courses</u>: **Gonzales & Murphy**
- Card Reader for Undergraduate Computing Laboratory Glover 146c: Gonzales & Murphy
- Purchase of Applied Flow Technology Fathom 4.0 software program: Murphy & Gonzales

Civil Engineering

- Technical Support for the Civil Engineering Computing Labs: Labadie
- Magnetic Card Readers for Student Entry to CE Labs: Labadie
- ESRI Site License for Geographic Information System Software: Labadie
- Increased Number of NT Workstations for the GIS Engineering Design Lab Labadie

Electrical and Computer Engineering

• Laboratory Maintenance: Lile & Aurand

• Software Licenses: Lile & Aurand

Mechanical Engineering

- CNC Milling Machine: Tong & Smith
- Wireless Radio Set: Tong & Smith
- Upgrading the Cambridge Materials Selector (CMS) software to Cambridge Engineering Selector (CES) software: Sampath, et al
- Repair and Upgrade of Refigeration Experiment in Thermal Fluids Laboratory: Loehrke & Tong
- <u>Liquid Nitrogen Dewar for Thermal Fluids Laboratory</u>: Loehrke & Tong
- Adept Robot Repair: Alciatore, Troxell, & Burgess
- Welder: Smith & Tong

Proposals summary, 1999-2000

Fund	Title	Supporters	Cost	Fund Balance Comments
Central				\$86,400
Central	FIDAP Software	5 CE & 3 ME profs	\$2,000	
Central	Wireless simulation Software	Prof. Nassar (ECE)	\$2,795	
Central	ECE card readers	1 ECE prof & 1 ECE staff	\$3,000	
Central	ECE lab upgrades	1 ECE prof & 1 ECE staff	\$10,575	
Central	ECE Semiconductor Analyzer	2 ECE profs & 1 ECE staff	\$33,000	evenion.
Central	ECE lab proctor	1-ECE prof & 1-ECE staff	\$6,000	Moved to ECE by ECE
Central	Web server	5 ENS staff & 4 students	\$5,920	
Central	Glover lab	39 students	\$30,000	
Central	Moments Magazine	14 students	\$1,500	Denied
Central	AERC computer replacement	2 students	\$1,500	Moved to CBE
Central	ME lab computers	1 ME prof	\$34,000	and the state of t
Central	NFS Thermo Cost Share	1 ME prof & 1 CE prof	\$20,000	
Central	CES software	1 ME prof, 1 CE prof, 1 ECE prof	\$3,565	
Central	FLUENT software	1 ME prof & 2 CE profs, 1 ECE prof	\$2,000	
Central	Glover 146 Lab upgrades	1 CBE prof & 1 CBE staff	\$16,000	
Central	Digital Imaging	3 ECE profs	\$9,000	
Central	HYSIS	2 CBE profs	\$1,000	Moved to CBE

Central	print quota software	3 ENS staff	\$2,500	
Central	Sun Rays	2 students & 3 ENS staff	\$13,000	
Central		Requested Total	\$187,355	\$100,955
CBE				\$12,500
CBE	SuperPro software	2 CBE profs	\$1,024.50	
CBE	GPS signal	2 CBE profs	\$800	
CBE	Lab upgrades	1 CBE prof & 1 CBE staff	\$5,000	
from Central	AERC computer replacement	2 students	\$1,500	
from Central	HYSIS	2 CBE profs	\$1,000	
CBE	Glover lab card reader	1 CBE prof & 1 CBE staff	\$800	
CBE	Fathom Software	1 CBE prof & 1 CBE staff	\$2,360	
CBE		Requested Total	\$12,484.50	\$15.50
CE				¢22.800
CE	Tools Course	D£ I -11:-	¢10.400	\$22,800
CE CE	Tech Support	Prof. Labadie	\$12,480	
}	Lab Entry Card Readers	P	\$2,240	
CE	ESRI software	Prof. Labadie	\$1,650	
CE	GIS workstations	Prof. Labadie	\$4,000	#2 420
CE		Requested Total	\$20,370	\$2,430
ECE			and the standard and the standard and analysis are an included in the standard and an included an included and an included an included and an included an incl	\$19,800
ECE	Lab maintenance	1 ECE prof & 1 ECE staff	\$6,440	
ECE	Software Licenses	1 ECE prof & 1 ECE staff	\$7,360	
from Central	ECE lab proctor	1 ECE prof & 1 ECE staff	\$6,000	
ECE		Requested Total	\$19,800	- 0 -
ME				\$25.500
ME ME	CNC Milling Machine	2 ME profs	\$12,644	\$25,500
ME ME	Wireless Radio Set			
IVIE	wheless kaulo Set	2 ME profs	\$1,723	

ME	CMS software	3 ME profs & 1 ME staff	\$6,060	
ME	Refrigeration upgrade	2 ME profs	\$692	
ME	Dewar	2 ME profs	\$1,216	
ME	Robot Repair	2 ME profs & 1 student	\$2,198	
ME	Welder	2 ME profs	\$3,468 \$967	Approved for partial funding only
ME		Requested Total	\$25,500	- 0 -