

ESTC Minutes

Engineering Student Technology Committee

March 20, 2018

4-5pm

Scott Bio 203

Present:

Sean Freeman (ATS), Erik Nielsen (ATS), Prof. Michael Bell (ATS)
Kristen Jackson (SBME)
Prof. Chris Snow (CBE), Mohammad Tanhaemami (CBE)
Prof. Joe Scalia (CEE), Ian Stockdill (CEE), Megan Scott (CEE)
Dylan Machovec (ECE)
Andrew Jones (Chair, ME), Sarah Martinez (ME)
Kelley Branson (ENS), Nick Stratton (ENS)
Mark Ritschard (Asst Dean Ops)

Absent:

Noah Beck (CBE)
Luke Flores (CEE),
Al Alothman (ECE), Cameron Key (ECE), Prof. Mahdi Nikdast (ECE)
Prof. Tammy Donahue (ME), Bryan Burk (ME)
Maryam Tidjani (intra-departmental), Zachary Gebhardt (intra-departmental)
Nick Stratton (ENS ITCLM)
Anthony Marchese (Assoc Dean AA)

Old Business & Welcome

Welcome and Minutes

The sign-in sheet was passed around with nametags. The minutes from the February 27 meeting were unanimously approved. (See ESTC website, <https://www.engr.colostate.edu/students/current-students/estc/>).

FY19 ESTC Budget - Server Tab

Kelley changed server budget. It was approved.
The document describes the new backup server. The old backup server is due to be retired.
The new server is ordered.
The new server is more expensive but has a 7 year lifecycle instead of 4 year.
The windows compute servers also changed. We purchased 3 new replacement servers.
We also purchased a renewal for the Univa grid software. The costs went up a bit (\$225).
We decided we didn't need to vote on these changes.

Budget Sections, Departmental Allocations

All departments have provided their plans to fully use their allocations.
The mechanical engineering plan involves a strategic \$20,000 holdover.
SBME plans to purchase a microscope.

The plans looked fine. We desire better communication for carry-over items.

Motion: approve the department allocation section, with a note for next year's committee to check on the department to check on the actual spending of the departments
Seconded and approved.

We also agreed to talk about increasing the departmental allocations in light of the continued growth at the next meeting.

Finally, a motion to approve the student wages section was seconded and approved.

New Business

Atmospheric Science Proposal

(Graduate) students need meteorological data for student classes (ATS640, ATS641).

The current data server (60TB) has mostly failed, leaving students with 20TB shared storage.

Datasets are growing in size. Months of data result in hundreds of terabytes.

They don't need backups, but local copies are essential.

The total cost is \$25,000.

The proposal also would replace another computer that drives 8 monitors for the Weather Lab.

They are requesting 88% of the total cost. The remainder will come from the ESTC departmental allocation.

We have no strategic initiative budgeted this year.

There is an 87,460 budget for next year.

Additional points made:

- *One-off approvals of significant proposals will reduce the possibility for head-to-head proposal competition

- *The ATS department typically gets less return on investment from their technology fees since they are based off site

- *The ATS department pays 27,000 and gets back 8,000 annually

- *One question was whether the ATS department had a sustainable plan for keeping this server online

- *ENS provided support for the previous server

- *It might be preferable to add this server to a long term plan with a lifecycle

- *Best to avoid running servers into the ground (since users can lose data in a crash)

- *Work is needed to identify the number of computer equivalents for the budget

- *Adding this to the Server support sheet was projected to add less than \$5,000 per year

- *Latency and cost issues put some other networking based approaches out of reach

A motion to put the requested ATS server into the ongoing budget was made, seconded, and approved

Liquid nitrogen as an ESTC Budget Item

The Scott Building was furnished with an external liquid nitrogen tank, and the boil off gas is used to provide nitrogen gas to laboratories throughout the building including both the research and teaching laboratories. So far this has been paid using a dwindling Scott building account. The funding horizon is about a semester. It is difficult to find other funding mechanisms due to the lack of ability to meter gas usage. It is possible to meter liquid use, but this is the minority use.

The total cost for the service is \$15,000-\$18,000.

An informal proposal was brought to ESTC to provide a cost share contribution (~\$10,000) to this ongoing charge.

With 3 months left to go on this fiscal year, the current charge would be \$7,500.

Several ideas were raised:

Idea A) Make this a formal proposal to be submitted alongside other proposals.

Idea B) Just approve this since it is a recurring charge

Idea C) Send out a call for proposals to spend unallocated money and give special consideration to the Nitrogen proposal as an ongoing charge

Motion to send out a call for proposals:

- *April 13th deadline for proposals

- *April 17th meeting.

- *Proposals without a representative to answer questions may get a lower funding priority.

Seconded and approved.

ESTC Positions Unfilled

CBE is missing an undergrad representative.

Next Meeting

April 3, 4-5pm, Scott 203

Respectfully submitted by Prof. Christopher Snow