

Engineering Student Technology Committee

Meeting minutes for September 1, 2004 - Engineering Conference Room - 8:00am

Present: Prof. David Alciatore (ME), David Bryant (ME), Bryce Eldridge (ECE), Ryan Fleming, chair (CE), Klaus Hartinger (ECE), Doug Hopper (ME), Derek Johnson (ChemE), Amanda Kaiser (ME), Prof. Kevin Lear (ECE), Elizabeth Lipp (intra), David Miller (ChemE), Mark Ritschard (ENS), Russ Schumacher (Atmos), Heidi Shray (ECE), Dr. Tom Siller (Academic Affairs), Luke Van Roekel (Atmos)

Absent: Prof. Jeff Collett (Atmos), ChemE undergraduate (unfilled), ChemE faculty (unfilled), CE undergraduate (unfilled), CE graduate (unfilled), CE faculty (unfilled), Intra-departmental undergraduate (unfilled)

Guests: Dr. Steve Abt (Dean) and Miranda Grote (intra)

- Welcome and introductions

Fleming welcomed the committee to the new school year and introductions were made. As this committee reports to the Dean of Engineering, Dr. Abt, interim Dean, charged the committee and offered to assist in any way needed. His office is always open if the committee would like to discuss any matters with him.

- Review of Committee Responsibilities

Ritschard reviewed the responsibilities of the committee, which are governed by the Charges for Technology manual (attached). The Charges for Technology manual is maintained by the University Charges for Technology (CFT) committee, of which three members come from this committee. Ritschard and Fleming will be two of the representatives and a volunteer is needed for the third.

- Filling all committee positions

Fleming noted that several committee positions remain unfilled and encouraged members to help fill them. A handout (attached) was distributed, showing which positions are vacant.

- Review of ESTC web pages

Ritschard handed out two views (attached) of the ESTC web pages (<http://www.engr.colostate.edu/ESTC>). Currently, he maintains the web pages for the committee and welcomes suggestions for improvements or additions. In particular, it was noted that the web pages provide an historical record of the last five years of committee work.

- University Technology Fee

Ritschard emphasized that this committee manages the "charge for technology" for the College of Engineering and that this fund is entirely separate from the "university technology fee" managed by ASCSU.

- Budget Reviews (this year and last year)

The budget for each academic year is set by the prior year's committee. Ritschard distributed this year's budget (attached) and explained that the goal is to carry forward \$0 to the next year. As a result, ENS spent funds in advance to allow others to carry funds forward, resulting in approximately a \$5K carry-forward to this fiscal year. Of the \$15K carry-forward in Strategic Initiatives, \$2K is for Biomedical Engineering, \$5K is for the ERC lab, and \$8K is for Environmental Engineering.

Ritschard also distributed a review (attached) of last year's (FY04) budget and expenses. The details (attached) are provided to show the committee exactly how funds are spent each year.

- Review of summer changes

Ritschard reported on the following items that were given to ENS to work on over the summer:

- Lab hardware changes

Ritschard distributed a spreadsheet (attached) showing what hardware was installed this summer as part of the committee's four-year replacement cycle. He explained that all equipment has been installed except for the computers. Delays in purchasing mean that the computers will not be in for about another 4 weeks. The spreadsheet also shows the exact cost of equipment purchased and whether the cost was over or under budget. The small amount over budget will be made up when the computers are purchased.

- Scholarships

Ritschard distributed a copy (attached) of the scholarship award letter written by Shawn Klawitter, Tim Hinerman, and Ritschard as charged by the committee last April. Also distributed was a list (attached) of this year's undergraduate award recipients. Graduate awards have yet to be made due to the complexity of the selection process.

- LMDS clock

Ritschard reported that one new clock was installed in the Lockheed Martin Design Studio (LMDS), but realized that last year's committee actually requested two. This committee advised Ritschard to purchase a second "large" clock to be placed at the other end of the LMDS.

- ERC classroom

Ritschard distributed two handouts (attached) showing the layout of the new computer classroom funded by this committee last spring. The first layout was the original one done by ENS, the second one was done by the design firm SmartDesks and actually proves to be a better fit for the room. The wall between the previous two rooms is down, new lights are in, and new electrical and network lines are being installed. The room still needs to be painted. Ritschard asked that the committee consider some additional funding to the room to address the unanticipated expenses associated with the new classroom, such as extensive network wiring and the need for flat-panel displays.

- Internet Cafe vendor

The vendor Zuba's chose not to return to the Internet Cafe this fall. Unless the committee feels strongly about finding another vendor, no replacement will be found at this time.

- Microwave table

The table for the Microwave provided by the Engineering College Council is on order.

- Card Readers

Ritschard reported that the card readers are not working well and ENS is aware of the failures. Unfortunately, replacements were ordered in May and the company informed ENS in August that the readers can no longer be made. ENS is in the process of exploring alternatives.

- Review of items for future discussion (in no particular order)


- * ERC classroom
- * Print Credits Review
- * Lab entry statistics
- * Cafe sound estimate
- * LMDS improvement ideas
- * Possible scholarship credit change (from 12 to 14)
- * Security in the labs
- * Microsoft Office on the Virtual Classroom
- * Scholarship criteria

Submitted by
Mark Ritschard

 CFT Manual 4-04 (CURRENT).doc


 ESTCmem.pdf

 ESTCweb.pdf

 AY05budget.pdf

 AY04expensesCat.pdf

 CFT 259130 FY04 for ESTC.xls

 ESTC new equip SU04.xls

 ESTC Scholarship Award Letter.doc

 ESTC Schol Recipients 8-04.doc

 Draft ERC classroom.pdf

 SmartDesks ERC lab design 8-04.jpg

Charges for Technology Manual

Colorado State University

April 2004

Contents

Rationale for Charges for Technology	1
Strategic Planning within Each College and throughout the University	2
Establishment of a College Technology Committee	2
Responsibilities of the College Technology Committee	2
Continuation of Charges for Technology	3
Distribution of Funds	3
Refunds.....	4
Proposal for Expenditures	4
Allowable Uses of Funds	5
Non-Allowable Uses of Funds	6
Basis of the Charges for Technology for Undergraduate Students	6
Basis of the Charges for Technology for Graduate Students	7
Need-Based Scholarships	7
Reports and Requests to the State Board of Agriculture.....	7
Format for the Annual Charges for Technology Report.....	8
Appendix A	10

Rationale for Charges for Technology

The students at Colorado State University, in conjunction with their respective faculty and college administrators, recognize and acknowledge the following:

- Technological skills provide fundamental advantages in the job market;
 - The State of Colorado and Colorado State University have many pressing fiscal needs that make it difficult to maintain a state-of-the-art technological environment for instructional programs; and
 - For many students, the cost of purchasing and maintaining state-of-the-art technology for personal use is prohibitive. This is due largely to the rapid changes in technology being experienced in the marketplace.
-

Therefore, to provide general access to state-of-the-art instructional technology, to reduce the costs of technology for each student by pooling the resources of all students, to provide a competitive advantage to students who attend Colorado State University, and to direct sufficient funding to these specific purposes, the students, faculty, and college administrators at Colorado State University endorse and support the collection of charges for technology. The charge is not intended to be a "use charge" and therefore is assessed to all students regardless of whether they actually use the equipment or whether they are enrolled in a course in the specific college for that semester.

The purpose of this manual is to standardize the policies governing the approval and administration of the different charges in use by the individual colleges at Colorado State University. The current University policy, approved by the State Board of Agriculture, provides enough latitude for each college to meet the needs of its respective constituencies.

At present, all the colleges at Colorado State University as well as the Intra-University Option have adopted and have been granted permission by the State Board of Agriculture to institute charges for technology. Each has a separate charge schedule consistent with the different needs of the constituencies at Colorado State University (see Appendix A).

The State Board of Agriculture approves the Charges for Technology for each of the colleges every year.

Strategic Planning within Each College and throughout the University

Each of the colleges should include long-range plans addressing future technological needs as part of its existing strategic planning. Coordination among colleges relating to future technological needs will undoubtedly result in overall savings for the University. Items not considered to be state-of-the-art in one college may provide a sufficient degree of functionality in another college or unit. The University will endeavor to make available to all of its units lists of equipment considered to be obsolete or surplus as well as needs of the different units.

Establishment of a College Technology Committee

Each college and the Intra-University Option at Colorado State University shall establish a College Technology Committee to oversee the administration of the charges for technology. The majority of committee members shall consist of students majoring within the college or the Intra-University Option and, at the discretion of the Dean, appropriate University personnel (e.g., faculty, computer lab coordinators). The Dean of each college shall be responsible for ensuring that adequate representation is present on this committee, according to the procedures outlined in the State Board of Agriculture approved Charges for Technology proposal for each college.

Responsibilities of the College Technology Committee

The College Technology Committee will ensure that extensive planning and communication with students will occur prior to any major commitment of funds. Input from student groups will be requested and considered prior to committee decisions. The College Technology Committee shall be responsible for ensuring that the funds returned to each college are spent according to established procedures. The Dean of each college shall be responsible for ensuring that these funds are administered according to CCHE guidelines with respect to "academic" charges as well as other applicable regulations or laws.

Continuation of Charges for Technology

The continuation of charges for technology within a college, as well as the amount of the annual charge, shall be voted upon by the College Technology Committee within each college at least every two years, beginning Spring Semester of 1996. This vote of the committee as well as the request for the continuance of charges for technology must be noted in the college annual Charges for Technology report.

Each year the College Technology Committee shall be authorized to request an increase or decrease of the charge by an amount not to exceed 5% of the current annual charge without completing the full approval process described in the next paragraph.

If an increase or decrease larger than 5% of the current annual charge is contemplated, the College Technology Committee shall hold open hearings, during the academic year, with all parties (undergraduate students, graduate students, and faculty). Following the hearings, a vote of all College Technology Committee members shall be taken. Passage of a charge change greater than 5% shall require approval by a two-thirds majority of the committee members.

All recommendations for continuation or changes shall be forwarded to the Dean for approval. The Dean's decision and reasons for the decision shall be communicated to the College Technology Committee. All charge recommendations shall then be forwarded to the University Information Technology Executive Committee (ITEC) and then to the Provost, who shall give approval before the recommendations are forwarded to the State Board of Agriculture. The State Board of Agriculture shall have ultimate authority for approving the continuation or changes. At the June Board meeting each year, continuation and proposed changes to the charges for technology are approved as part of the budget process for the coming fiscal year.

Requests for changes greater than 5% shall include the following information:

- Five-year history on actual and projected (for the current fiscal year) revenue and expenditures, and projected revenue and expenditures under the proposal
- Space and other facilities related requirements, if any, related to the change
- A description of the process used to obtain student support for the change
- Specific rationale and justification for the requested increase

Distribution of Funds

Each College Technology Committee shall be responsible for recommending a procedure for distribution of the funds resulting from the charges for technology. This distribution must be approved by the Dean of each college. The College Technology Committee may opt for centralizing the funds, or it may opt to return a percentage to each department to reflect the different needs of the college's various disciplines. Expenditures shall be reviewed beforehand by the Dean. Any disputes between the College Technology Committee and the Dean will be referred to the Provost for resolution.

Refunds

There may be unusual situations that could justify a refund of the technology charge, and students may request a refund from the College Technology Committee. Such a request shall be made in writing and addressed to the Chairperson of the College Technology Committee. The decision to grant a refund shall be determined by a majority vote of the College Technology Committee. The student may appeal the committee's decision by notifying the committee and arranging a date to meet with committee members. Arguments from both sides will be heard and a vote taken. Decisions made by the committee at that meeting shall be final. Refunds will not be granted for the following reasons:

- 1) no predicted use of the equipment
- 2) non-enrollment in any specific college courses that semester
- 3) change of college later than one week after census date

A refund may be permitted on the grounds of change of college before or within one week following the official university census date. Students requesting refunds must present documents proving a change has been processed by the Registrar's Office. A refund may also be allowed because of withdrawal from the University as a result of serious illness, disabling accident, military call-up, or activation of Reserve or National Guard units, as stated in University policy, and is subject to confirmation by the Office of Enrollment Services.

Proposal for Expenditures

To improve educational experiences, proposals for expenditures of the funds resulting from the charges for technology shall be solicited by the College Technology Committee from students and faculty, preferably working together. Members of the committee are primarily responsible for identifying departmental needs; however, the departments may make their own requests. Moreover, all students having suggestions about laboratory equipment, computers, and other general-purpose requirements are encouraged to bring them to the respective committee members, department heads/chairs and/or the Dean's Office. Laboratory supervisors, graduate teaching assistants, and faculty members are also encouraged to make suggestions as they often know what improvements are needed and what is commercially available to upgrade and enhance the different laboratories.

As a University-wide teaching facility, the University Libraries may submit proposals for expenditures to established College Technology Committees, either for assistance in special technology for students in particular colleges, or for across-the-board technology enhancements.

The Assistive Technology Resource Center should be consulted when designing computer laboratories with improved accessibility for all students. To meet the needs of individual students with specific disabilities, the Assistive Technology Resource Center may purchase or provide specialized equipment or other appropriate accommodation(s) as warranted on behalf of a particular student. Total expenditures for such accommodations during each year will be allocated to each college's E&G budget, in proportion to the Charges for Technology collected by each college the previous year, to reimburse these costs incurred by the Assistive Technology Resource Center.

A college may carry forward Charges for Technology funds for several years to provide for major purchases. Requests for carry forward must be fully documented and justified and the major purchases in-

involved must be included in the strategic plan for the college. A multi-year purchase must not be in conflict with pertinent laws of the State of Colorado or other applicable regulations. Any requests for carry forward funds for multi-year purchases must be included in the annual report and must be approved by the Provost.

Allowable Uses of Funds

The following are allowable uses of the funds resulting from the charges for technology:

1. Student hourly compensation

Funds can only be used specifically to compensate students for monitoring or supervising computer laboratories or other laboratories where a substantial amount of the equipment has been purchased with the funds resulting from the charges for technology, or to compensate students for offering technology training and/or technology development specifically for students. Such technology training or development shall not be in support of academic courses or other functions normally funded by academic units. Students otherwise occupied in normal departmental functions, such as graders or tutors, shall not be paid from these funds.

2. Examples of allowable purchases of computer hardware and software

Computers	Printers
Plotters	Hard disk drives
CD-ROM drives	Network cabling and devices
Operating systems	Word processors
Spreadsheets	Graphics packages
Utility packages	Compilers
Simulators	Productivity tools
Software licenses	Software upgrades
Tape backup devices	Diagnostic software
Multimedia products	Security systems
File servers	Ergonomic furniture
Modems	compatible with learning stations

3. Examples of allowable purchases of other instructional equipment

Scientific laboratory instruments	General testing equipment
Diagnostic hardware	Kilns
Art studio technologies	Electrical or electronic music technology
Cameras	Videotape machines
Video teleconferencing equipment	

4. Examples of allowed purchases of laboratory supplies

Printer paper for student use	Printer cartridges
Mouse pads	Video and audio tapes

This category is not intended to be used for the purchase of otherwise typical laboratory supplies for equipment not purchased with funds resulting from the charges for technology.

5. Maintenance

Charges for maintenance required for the continued use of the items purchased with funds resulting from the charges for technology are allowed and encouraged.

In addition, credit card costs incurred by the University in permitting students to pay the charges for technology are allowable "cost of doing business charges."

The constituency of a college may wish to exclude or include any of the aforementioned items. Such an exclusion or inclusion must be recommended by the College Technology Committee of the respective college and the action filed with the Dean's Office and the Provost's Office.

Non-Allowable Uses of Funds

The following are non-allowable uses of funds resulting from the charges for technology:

Non-student personnel	Graduate student assistantships
Personnel recruiting expenses	General furniture
General office supplies	Vehicle rental
Facilities remodeling	Photocopying
Equipment not accessible to students	Travel

Any photocopying such as copying for computer manuals is not an allowable use of funds.

The term "accessible to students" is meant to imply equipment used by students in order to fulfill academic requirements. Such equipment may be available in an open lab or in a specialized laboratory accessible only while a faculty member or a teaching assistant is present. Often specialized equipment can only be used in a meaningful manner when a direct supervisor is present. Ordinarily, purchase of administrative equipment is not considered an appropriate use of the funds.

The appropriateness of a specific item may be questioned by a Dean and advice obtained from the internal audit office of the University. Inappropriate expenditures proposed by the College Technology Committee can be vetoed by the college Dean. A process for appeals and clarification shall be in place and rests with the Provost, who shall have final say. If Deans allow inappropriate expenditures, they are subject to adverse audit findings which will be addressed during regular performance reviews.

Basis of the Charges for Technology for Undergraduate Students

All undergraduate students enrolled for nine or more credits will be assessed the charges for technology by each of the colleges. The charges will be prorated for students taking less than nine credits. No distinction is made between resident and non-resident students.

All charges collected from students in a given college will be transferred directly to that college as a separately budgeted item in the Resident Instruction budget of the college.

Basis of the Charges for Technology for Graduate Students

Graduate students enrolled for six or more credits in colleges that require charges for technology of graduate students will be assessed the charges for technology. The charge will be prorated for students taking less than six credits. No distinction is made between resident and non-resident students. Graduate students paying the continuous enrollment fee do not pay the charges for technology.

Need-Based Scholarships

Ten percent of the Charges for Technology funds collected each Fall and Spring shall be designated for need-based scholarships in each college. The College CFT committees shall determine the amount of the scholarships, the eligibility requirements, and the application process. The process shall consider gross financial need and enrollment status. College CFT committees may also establish other criteria (e.g., grade point average, year in school) as they see fit. Scholarships shall not exceed the higher of a) 50% of full tuition for the current year or b) twice the total CFT charges assessed a single student for four years (eight semesters plus any intervening summer sessions). Students on less than half-time status shall not be eligible for CFT need-based scholarships.

Each year, the Office of Student Financial Services shall provide each college with a list of eligible students, based on their gross financial need and other applicable criteria established by the college. The summary of need-based scholarships awarded by each college shall be included in the annual Charges for Technology report provided to the Board of Governors of the Colorado State University System.

Reports and Requests to the State Board of Agriculture

Each year each college shall produce an annual Charges for Technology report. Copies shall be made available upon request to any student or faculty member, and a copy of the report shall be posted at all central departmental bulletin boards or on the Web.

Each college shall submit to the Director of Academic Computing and Networking Services the annual Charges for Technology report to be collated into a comprehensive report for the University and submitted to the Information Technology Executive Committee for review. The report is then presented to the Provost, the President's Cabinet and subsequently forwarded to the State Board of Agriculture.

Colleges requesting changes greater than 5% shall submit this request to the Information Technology Executive Committee for review. The report is then presented to the Provost, the President's Cabinet and subsequently forwarded to the State Board of Agriculture.

The State Board of Agriculture receives the annual Charges for Technology report at its May meeting. At the June meeting, it receives requests for changes in the charges for technology. Also, all continuing charges are approved each year at the June meeting. Consequently, annual reports from the colleges are due to the Information Technology Executive Committee by March 1, and requests for changes in the charges for technology by April 1.

Format for the Annual Charges for Technology Report

The information requested for the report includes:

- Estimated revenue for the current fiscal year
- Budgeted expense for the current fiscal year
- A detailed explanation of the use of the funds
- Administrative process
- A detailed description of the impact that Charges for Technology are having on educational programs
- Need-based scholarships provided to students (must be 10%)
- Request for carry forward, if any
- Request for continuance of the current charges, if applicable

Sample of an annual Charges for Technology report (from the College of Natural Sciences)

Impact of Charges Collected: Charges collected during 1993-94 totaled approximately \$480,000. Over \$40,000 was used for need-based scholarships. The college continued its policy of funding purchases in two general areas: computers, including software and peripherals, and laboratory equipment. Selected examples follow. The Department of Biochemistry continued to upgrade its student laboratories to industry standards with the purchase of 10 spectrophotometers. The department also continued investments in tutorial software for their Undergraduate Resource Center. The Department of Biology has replaced worn, damaged and outdated microscopes in introductory teaching laboratories with the latest technology. This includes binocular compound microscopes from Leica, as well as stereo zoom dissecting scopes. The Department of Computer Science continued with its multi-year plan for upgrading its laboratories. CS purchased 17 x-terminals (for use on UNIX applications) and improved the networking in its lab with the purchase of ethernet items for a large server. The Department of Chemistry chose to invest its funds resulting from the Charges for Technology in improving its capability to present and support modern lecture demonstrations. Videodisc players, visual presenters, Macintosh computers with LCD projectors, and an advanced optical reader were part of the lecture/demonstration package approved for this effort. The department also purchased miscellaneous equipment to upgrade undergraduate quantitative analysis and physical chemistry labs. The Department of Mathematics is now teaching introductory calculus courses (M160 and 161) on Macintosh computers. Funds resulting from the Charges for Technology were used to upgrade the site license for Maple, the teaching software used by the department, and to purchase other software associated with teaching. The department also purchased some additional computer hardware. The Department of Physics has been upgrading each of its undergraduate laboratory experiences over the past four years. This year's targets included astronomy, general physics, and modern physics. Beginning astronomy courses have allowed only very limited viewing time in the past, because the hundreds of students taking the course each semester had only one telescope (at the observatory) to use. In perhaps the most innovative use of funds resulting from the Charges for Technology, the department proposed to purchase six (to be increased to 12 with future purchases) 8-inch telescopes. The department will construct mounts and secure storage for the telescopes on the roof of the engineering building. Telescopes will be temporarily mounted for evening use, and hundreds of viewing hours will be added to the experience of the participating students. The Department of psychology continued its aggressive addition of laboratory experiences to undergraduate education. Equipment purchases went to sensation and perception labs (sensory workstations which demonstrate visual, auditory, and speech phenomenon); experimental labs (data recording and computer analysis equipment);

and physiological labs (brain wave recording and analysis equipment). Our psychology students now experience what is perhaps the most modern series of teaching labs in the country. The Department of Statistics used funds resulting from the Charges for Technology to help equip their new laboratory which will be operated jointly with the College of Liberal Arts. This is the fourth College of Natural Sciences student computing laboratory. Funds resulting from the Charges for Technology purchased the server system which links the 44 networked workstations in the laboratory.

Administration of Funds: The funds resulting from the Charges for Technology distributed to each department are determined by a formula based on the number of majors and the laboratory contact hours generated by each department. The College has a Policy Manual for use by departments in developing proposals. Departments solicit input and ideas from students and faculty members and work with student clubs to generate proposals. Departmental proposals are then submitted to the College Student Council for approval. Council members consider each proposal and question departmental representatives as to proposed usage, availability to students, possible alternatives, etc. The Council has final word on approval of departmental proposals. The Assistant to the Dean monitors expenditures for consistency with university and college guidelines.

Appendix A

Charges for Technology Each Semester (2004-2005)

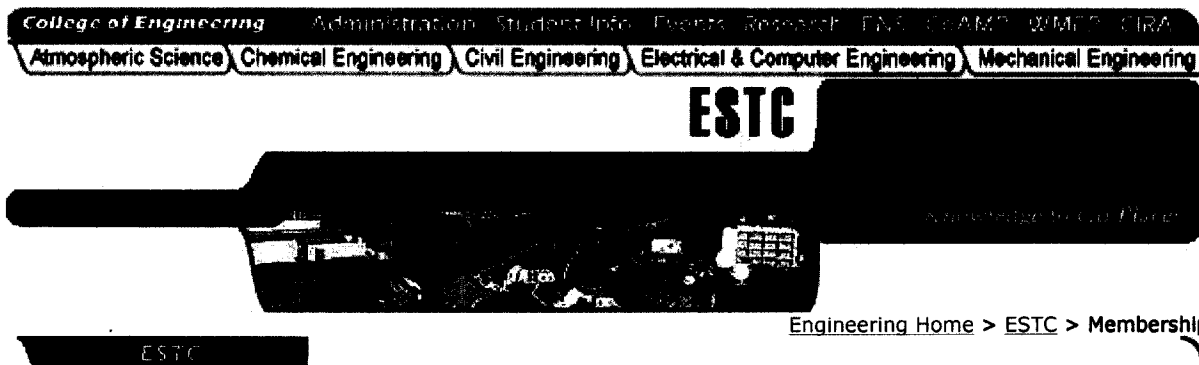
College	Undergrad. Charge	Grad. Charge	Summer Charge
Agricultural Sciences	\$75	\$75	No
Applied Human Sciences	\$69	\$69	Yes
Business	\$100	\$100	No
Engineering	\$155	\$155	No
Intra-University Option	\$36	N/A	No
Liberal Arts	\$55	\$55	No
Natural Resources	\$100	\$100	No
Natural Sciences	\$100	\$0	No
Veterinary Medicine	\$100	\$0	No

Colleges may assess charges for technology to summer students.

Undergraduate students enrolled for nine or more credits will be assessed the full charge for technology. The charge will be prorated for students taking less than nine credits.

Graduate students enrolled for six or more credits in colleges that require charges for technology of graduate students will be assessed the full charge. The charge will be prorated for students taking less than six credits. Graduate students paying the continuous enrollment fee do not pay the charge for technology.

No distinction is made between resident and non-resident students.



ENGINEERING STUDENT TECHNOLOGY COMMITTEE (ESTC) MEMBERSHIP

Per the college code, the ESTC has 23 members (16 students, 6 faculty, & 1 staff):

- four representatives from each engineering department (three from Atmospheric Science), all of which are appointed by the chair of the department
 - two undergraduates (*none from Atmospheric Science*)
 - one graduate (*two from Atmospheric Science*)
 - one faculty member
- two representatives from intra-departmental majors, appointed by the coordinator for the majors
- the Associate Dean for Academic Affairs
- the Director of Engineering Network Services

Each department representative serves a two year term.

ESTC MEMBERSHIP 2004-2005

Name	Position	Department	Term Expires
<u>Tom Siller</u>	Associate Dean	Academic Affairs	<i>ex officio</i>
<u>Michelle L'Heureux*</u>	<i>graduate</i>	Atmospheric Science	2005
<u>Chris Rozoff*</u>	<i>graduate</i>	Atmospheric Science	2004
<u>Steve Rutledge*</u>	<i>faculty</i>	Atmospheric Science	2004
unfilled	<i>undergraduate</i>	Chemical Engineering	2006
<u>David Miller</u>	<i>undergraduate</i>	Chemical Engineering	2005
<u>Derek Johnson</u>	<i>graduate</i>	Chemical Engineering	2005
unfilled	<i>faculty</i>	Chemical Engineering	2006
<u>Ryan Fleming, chair</u>	<i>undergraduate</i>	Civil Engineering	2005
unfilled	<i>undergraduate</i>	Civil Engineering	2006
unfilled	<i>graduate</i>	Civil Engineering	2006
<i>unfilled</i>	<i>faculty</i>	Civil Engineering	2005
<u>Bryce Eldridge</u>	<i>undergraduate</i>	Elec. & Comp. Engineering	2005
<u>Heidi Shray</u>	<i>undergraduate</i>	Elec. & Comp. Engineering	2006
<u>Klaus Hartinger</u>	<i>graduate</i>	Elec. & Comp. Engineering	2006
<u>Kevin Lear</u>	<i>faculty</i>	Elec. & Comp. Engineering	2005
<u>Mark Ritschard</u>	Director	Engineering Network Services	<i>ex officio</i>

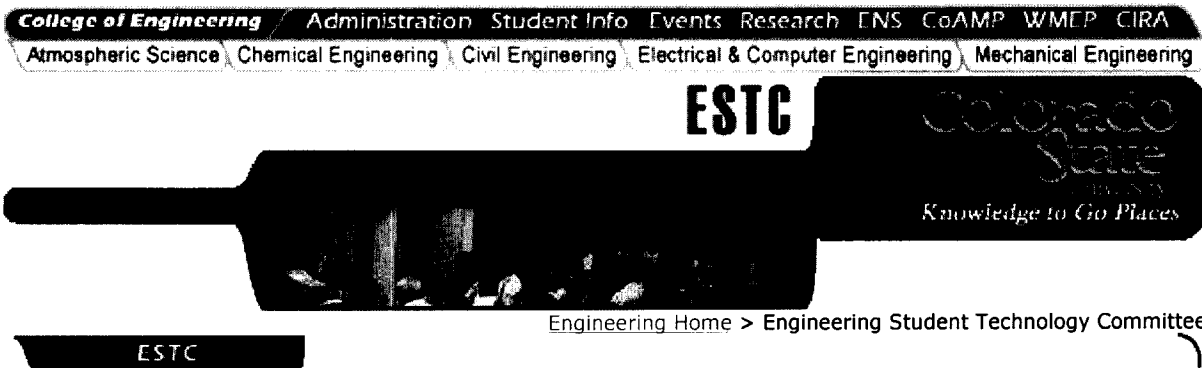
unfilled	<i>undergraduate</i>	Intra-departmental	2006
Elizabeth Lipp	<i>undergraduate</i>	Intra-departmental	2005
David Bryant	<i>undergraduate</i>	Mechanical Engineering	2005
unfilled	<i>undergraduate</i>	Mechanical Engineering	2006
Doug Hopper	<i>graduate</i>	Mechanical Engineering	2005
David Alciatore	<i>faculty</i>	Mechanical Engineering	2006

*The Atmospheric Science members meet separately from the rest of the committee. This year, the three official members are joined by students Brenda Dolan, Todd Ellis, Matt Rogers, and Sarah Tessendorf and by staff Natalie Marquez and Walt Naylor. Together, these individuals determine the distribution of the funds allocated to Atmospheric Science.

ESTC Membership in Previous Years

[1999-2000](#) [2000-2001](#) [2001-2002](#) [2002-2003](#) [2003-2004](#)

Contact Webmaster
College of Engineering (970) 491-6220
Last modified on August 12, 2004



ENGINEERING STUDENT TECHNOLOGY COMMITTEE

The Engineering Student Technology Committee (ESTC) is charged with the management and distribution of the technology charge paid by students in the College of Engineering. It reports to the Dean of Engineering and is governed by the CSU Charges for Technology Manual.

The ESTC sends representatives to the University Charges for Technology Committee, the governing body for the charge for technology process at Colorado State University.

Have ideas on how to spend your technology charge funds?

Like to see some changes made in the labs?

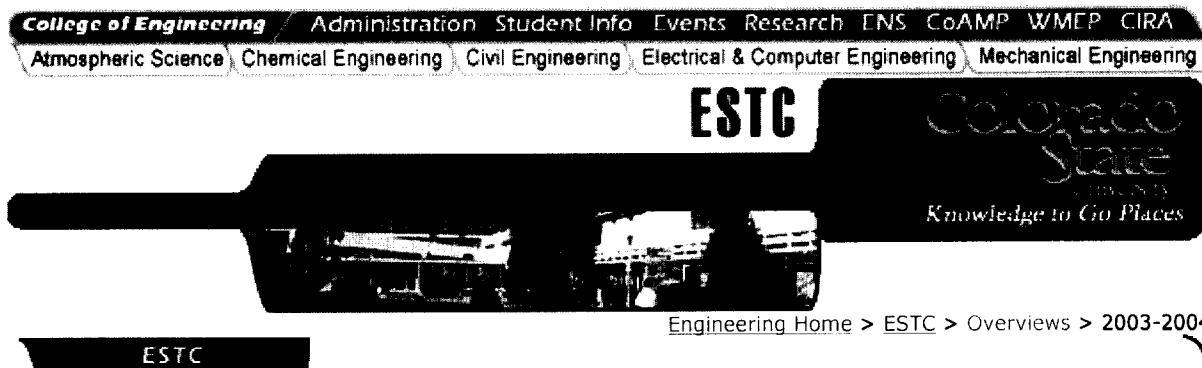
[Leave a suggestion](#) for the committee as a whole or contact your departmental representatives.

- [ESTC Membership](#)
- [Committee Activity by Year](#)
- [Charges for Technology manual](#) (Word document)
- [University Charges for Technology Committee \(ACNS link\)](#)

FREQUENTLY ASKED QUESTIONS

- [What is the current charge for technology for Engineering students?](#)
- [How is the ESTC membership determined?](#)
- [How is the Charge for Technology fund spent?](#)

[Contact Webmaster](#)
College of Engineering (970) 491-6220
Last modified on February 25, 2003



ENGINEERING STUDENT TECHNOLOGY COMMITTEE

REVIEW OF ACADEMIC YEAR ACTIVITY

2003-2004

Semester charge for technology was \$150 (no summer charge).

- **Academic Year Budget: [table](#) or [pie chart](#)**
- **Actual Annual Expenses**
 - **Expenses by Budget: [table](#) or [pie chart](#)**
 - **Expenses by Category: [table](#) or [pie chart](#)**
- **Special Projects**
 - **Biomedical Engineering Laboratory - \$5,000**
 - **Clock in Lockheed Martin Design Studio - \$30**
 - **Electronic Classroom at the Engineering Research Center - \$5,000**
 - **Performance Engineering Mobile Computer Laboratory - \$7,500**
- **Meeting Minutes (posted when approved)**
 - **[September 25, 2003](#)**
 - **[September 30, 2003](#)**
 - **[October 7, 2003](#)**
 - **[October 28, 2003](#)**
 - **[November 4, 2003](#)**
 - **[December 2, 2003](#)**
 - **[February 3, 2004](#)**
 - **[February 10, 2004](#)**
 - **[March 2, 2004](#)**
 - **[March 23, 2004](#)**
 - **[March 30, 2004](#)**
 - **[April 13, 2004](#)**
 - **[April 27, 2004](#)**
- **[Committee Membership](#)**

[Contact Webmaster](#)
College of Engineering (970) 491-6220
Last modified on August 18, 2004

Student Charges for Technology Fund

College of Engineering

Colorado State University

Academic Year 2004-2005 Budget

	Forward from FY04	FY05 Allocation	Total FY05 Budget
Advance Purchases	\$60,000	\$0	\$60,000
Assistive Technology	\$0	\$2,000	\$2,000
Business Expenses	\$0	\$3,000	\$3,000
Central Services & Systems			
Computer Lab Equip. Replacement	\$52,537	\$149,000	\$96,463
Laboratory Maintenance & Support	\$3,863	\$23,000	\$19,137
Network Maintenance	\$2,261	\$4,000	\$1,739
Server Maintenance & Support	\$35,491	\$70,000	\$34,509
Student Wages	\$0	\$70,000	\$70,000
Department Allocations			
Atmospheric Science	\$3,328	\$21,000	\$24,328
Chemical Engineering	\$3,586	\$19,900	\$23,486
Civil Engineering	\$14,106	\$30,000	\$44,106
Electrical & Computer Engineering	\$3,694	\$16,800	\$20,494
Intra-departmental majors	\$3,000	\$5,000	\$8,000
Mechanical Engineering	\$4,372	\$38,300	\$33,928
Scholarships	\$0	\$53,000	\$53,000
Strategic Initiatives	\$15,939	\$20,000	\$35,939
	\$5,129	\$525,000	\$530,129

Student Charges for Technology Fund

College of Engineering
Colorado State University

Academic Year 2003-2004 Revenue & Expenses

	FY04 Budget	FY04 Actual
Revenue		
FY03 Carry Forward	\$15,921	\$15,921
New Equipment Reimbursements		\$6,359
Print Quota Purchases		\$2,973
Technology Charge (Fall)	\$286,000	\$267,831
Technology Charge (Spring)	\$234,000	\$243,117
Used Equipment Sales		\$16,010
	\$535,921	\$552,211
Expenses		
Advance Purchases	\$60,000	\$0
Assistive Technology	\$2,000	\$2,479
Business Expenses	\$3,000	\$1,532
Central Services & Systems		
Computer Lab Equip. Replacement	\$27,930	\$84,232
Laboratory Maintenance	\$14,146	\$21,273
Network Maintenance	\$3,965	\$7,385
Server Maintenance & Support	\$68,319	\$115,234
Student Wages	\$65,000	\$63,178
Department Allocations		
Atmospheric Science	\$23,977	\$22,826
Chemical Engineering	\$12,673	\$16,387
Civil Engineering	\$43,692	\$29,586
Electrical & Computer Engineering	\$23,412	\$19,970
Intra-departmental majors	\$12,000	\$9,000
Mechanical Engineering	\$57,481	\$61,852
Scholarships	\$55,000	\$52,363
Strategic Initiatives		
Compute Power	\$10,000	\$10,000
EECL Computer Lab	\$20,000	\$20,000
Environmental Engineering Lab	\$11,000	\$2,248
Graduate Citrix Farm	\$5,000	
Other	\$17,326	\$7,536
	\$535,921	\$547,082

Carry Forward to FY04: \$5,129

Actual Expenses by Category	
Assistive Technology	\$2,479
Backup Supplies	\$1,030
Backup Equipment	\$4,254
Computer Maintenance & Repair	\$1,438
Computer Peripherals	\$1,019
Computer Upgrades	\$751
Computers	\$84,911
Laboratory Equipment	\$66,032
Laboratory Equipment Maintenance	\$1,825
Laboratory Improvements	\$4,410
Laboratory Equipment Supplies	\$796
Modem Access for Students	\$928
Monitors	\$15,519
Network Equipment	\$8,299
Network Improvements	\$2,833
Network Maintenance	\$1,390
Network Supplies	\$444
Paper	\$5,504
Printer Maintenance	\$2,730
Printers	\$33,529
Projection Equipment	\$7,872
Revenue Collection Expenses	\$1,532
Scholarships	\$52,363
Security Systems	\$195
Server Maintenance & Repair	\$1,539
Server Peripherals	\$98
Server Upgrades	\$1,422
Servers	\$24,084
Software	\$51,043
Storage (network File Space)	\$91,133
Student Wages	\$63,178
Telephone Charges	\$795
Toner, fusers, and drum/transfer kits	\$11,708
Total expenditures	\$547,082

Charges for Technology Fund

College of Engineering
Account Number 259130
Fiscal Year 2004 (July 1, 2003 - June 30, 2004)

Summary table with columns: Total Revenue, Balance Forward '02-'03, Expenses Paid, Funds Transferred, Account Balance. Values: \$531,789.75, \$15,920.52, \$542,580.98, \$0.00, \$5,129.29

Budget Summary table with columns: Budget, Additional Allocation, Where is the additional from?, Expenses Paid, Funds Moved, Balance, Comments. Values: 520,000, 43,996.11, 542,580.98, 21,415.13, 0.00

Central Services & Systems

Equipment Replacement table with columns: Description, Budget, Additional Allocation, Where is the additional from?, Expenses Paid, Funds Moved, Balance, Comments. Items include Computers, Laser Printers, Monitors, etc.

Laboratory Maintenance and Support

Table listing laboratory maintenance items like Cabinet Locks, Computer Table reinforcement, Exceed licenses, etc. with budget and expense details.

Network Tools & Maintenance

Table listing network tools and maintenance items like Footpaths (AERC & ERC) network upgrades, Network Equipment, etc.

Servers & Services

Table listing server and service items like Backup Equipment upgrades, Backup Software, Citrix license renewal, etc. with budget and expense details.

Student Wages & Benefits (lab support)

Table listing student wages and benefits for lab support, including names like C. Carlin, W. Crane, A. Fleming, etc.

Departmental Allocations

Summary row for Departmental Allocations: 120,000, 62,963.22, 155,120.61, 27,842.61, \$0.00

Atmospheric Sciences

Table listing atmospheric sciences department expenses like Dept. Revenue above budgeted \$19K, Apple Laptop, Camcorder battery, etc.

Chemical Engineering

Table listing chemical engineering department expenses like Aspen license renewal, Aspen PIMS & MIMI software, etc.

Civil Engineering

Table listing civil engineering department expenses like ARView license renewal, ATS testing machine upgrades, etc.

Electrical & Computer Engineering

Table listing electrical and computer engineering department expenses like CD drive tray drive belts, Electronics Boards, etc.

Intra-departmental majors

Table listing intra-departmental major expenses like Biomedical Engineering Lab, Environmental Engineering Lab, etc.

Mechanical Engineering

Table listing mechanical engineering department expenses like AERC Sunray network, Adams Simulation Program, etc.

Miscellaneous

Table listing miscellaneous department expenses like Assistive Technology, Bad Debt, Credit Card Expenses, etc.

Strategic Initiatives

Table listing strategic initiative expenses like Adjustment for Actual Tech Fund Revenue, Adjustment for Atmos revenue, etc.

Advance Purchases for '04-'05

Summary row for Advance Purchases for '04-'05: 0.00, 60,000.00, 0.00, 60,000.00, \$0.00

Credits & Revenue

Summary row for Credits & Revenue: Total 531,789.75, Moved to Budget 15,173.00, Total Revenue 531,789.75

Credits (FRS subcodes 800-8999)

Table listing credit items like Print Quota Purchases (cash), Scanner Purchases (refunds), SmartCard Purchases (cash), etc.

Revenue (FRS subcodes less than 800)

Table listing revenue items like Citrix Farm access for faculty & staff, Computer Purchases (used from/to Ch), etc.

Charges for Technology

College of Engineering

Lab Equipment Purchased in 2004

Actual Equipment Purchased	graph	UNIX	thin	19" flat	21"	19"	B/W	color	36"	60"	large	photo	dig	smart	Equip. Value		
	comp	work	clients	panel	Trinitron	Trinitron	laser	laser	plot	plot	scan	scan	send	proj		plasma	brd
AERC																0	
Allison Hall																0	
Anderson Lab	3					34	3									22,390	
Design Studio	6							1		1	2		2			33,963	
Technical Shop	1					1										1,970	
Electronic Classroom																0	
ERC lab														1	1	3,448	
GIS lab	21															36,505	
Internet Café																0	
Loaner pool	3													1		7,461	
	34	0		0	0	0	35	3	1	0	1	2	0	2	0	1	105,738

	<u>Actual Cost</u>	<u>Budgeted</u>	<u>diff</u>	<u>mult.</u>	<u>total</u>
computer	1,738	1,500	238	3	715
graphics workstation		N/A	3,000	0	
UNIX workstation		N/A	6,000	0	
thin-client		N/A	900	0	
19" flat panel display		N/A	550	0	
21" Trinitron monitor		N/A	500	0	
19" Trinitron monitor	232	300	68	35	2,380
black & white laser printer	3,096	2,500	596	3	1,787
color laser printer	6,620	4,500	2,120	1	2,120
36" color plotter		N/A	8,000		
60" color plotter	14,690	14,000	690	1	690
regular scanner	931	250	681	1	681
large-format scanner		N/A	1,600	0	
photo scanner	180.81	200	19	2	38
digital sender		N/A	1,700	0	
projector	2,246	2,800	554	2	1,108
plasma display		N/A	13,000	0	
smart board	1,202	1,600	398	2	797
					1,670

September 1, 2004

«FName» «LName»
«HomeAddr»
«HomeCity», «HomeST» «HomeZip»

Dear «FName»:

I am pleased to inform you that you have been selected to receive a \$«Total» Engineering Student Technology Committee (ESTC) scholarship. One half of the award will be available for the fall 2004 semester and the second half for the spring 2005 semester if the criteria continue to be met. You must be enrolled in the College of Engineering, registered for at least 12 credits per semester counting toward your engineering degree requirements[“.” (for need based) *or* “, and maintain a cumulative 3.0 GPA.” (for merit based)]

The ESTC is proud to be able to give back to fellow students. We want everyone to have an equal opportunity to achieve their educational dreams and not be hindered from a quality education because of financial difficulties. Our goal is to help students succeed in their engineering education!

The committee likes to hear from our recipients. We would be grateful for a note about yourself and your academic progress as well as your future plans. We trust that this scholarship will help you fulfill your academic goals and would enjoy hearing from you. We wish you all the best in your academic achievements.

For more information about the ESTC, please see <http://www.engr.colostate.edu/ESTC>.

Sincerely,

Thomas Siller
Associate Dean
Academic Affairs

<<current ESTC chair>>
Chair
Engineering Student Technology Committee

ESTC Award	Lname	Fname	Middle	Majr	RqrdGPA	Total
merit-1000	Espinoza	Paul	Andrew	CE	3.00	\$1,000.00
merit-1000	Mashl	Casey	Lynn	ChE	3.00	\$1,000.00
merit-1000	Quillen	Kristopher	Paul	ME	3.00	\$1,000.00
merit-1000	Shideler*	Emily	Ann	EE	3.00	\$1,000.00
merit-1000	Vance	Amanda	Lynn	CE/ESspace	3.00	\$1,000.00
merit-1400	Dodson	Christina	Lael	ENV	3.00	\$1,400.00
merit-1400	Doner	Eric	Oliver	EE	3.00	\$1,400.00
merit-1400	Harper	George	Dodson	CE	3.00	\$1,400.00
merit-1400	Marich	Jennifer	Lynne	CE	3.00	\$1,000.00
merit-1400	Miller	Timothy	Brian	CHE	3.00	\$1,400.00
merit-1400	O'Rourke	Justin	Patrick	CHE	3.00	\$1,400.00
merit-1400	Rodrian	Logan	Paul	CpE	3.00	\$1,400.00
merit-1400	Roszelle*	Breigh	Nonte	ME	3.00	\$1,400.00
merit-1400	Ruch	Andrew	David	CpE	3.00	\$1,400.00
merit-1400	Shannon	Ryan	Lee	ME	3.00	\$1,400.00
merit-1400	Simpson	Erin	K.	ME	3.00	\$1,400.00
need-1000	Doyle	Paul	F	ME	2.00	\$1,000.00
need-1000	Johns	Eric	Christopher	ME	2.00	\$1,000.00
need-1000	Johnson	Craig	Murell	CpE	2.00	\$1,000.00
need-1000	Mathews	Jay	Aaron	EE	2.00	\$1,000.00
need-1000	McKinney	Chad	William	ENV	2.00	\$1,000.00
need-1000	Merz	Lindsay	Leigh	CE	2.00	\$1,000.00
need-1000	Redden	Andrew	Guy	ME	2.00	\$1,000.00
need-1000	Reinholz	Daniel	Lee	EE	2.00	\$1,000.00
need-1000	Umland	Robert	Tybalt	CpE	2.00	\$1,000.00
need-1000	Woodworth	Jonathan	David	ME	2.00	\$1,000.00
need-500	Andersen	Karena	Kay	CpE	2.00	\$500.00
need-500	Davis	Michael	Jason	ME	2.00	\$500.00
need-500	Durland	Garrett	Waggoner	EE	2.00	\$500.00
need-500	Franco	Humberto	Ivan	CE	2.00	\$500.00
need-500	Guzman	Elisa	Marina	ME	2.00	\$500.00
need-500	Hicks	Jonathan	C	ME	2.00	\$500.00
need-500	Johnson	David	A	CE	2.00	\$500.00
need-500	Johnson	Eric	Matthew	CE	2.00	\$500.00
need-500	Johnson	Nathaniel	Thomas	ME	2.00	\$500.00
need-500	Koehn	Justin	Lynn	ME	2.00	\$500.00
need-500	Komorowski	Jason	Scott	ME	2.00	\$500.00
need-500	Lanning	Matthew	William	EE	2.00	\$500.00
need-500	Mapes	Terry	Steven	ME	2.00	\$500.00
need-500	Rupp	Victoria	Marie	CE	2.00	\$500.00
need-500	Senyk	Borys	Elia	CpE	2.00	\$500.00
need-500	Stabler	Jennie	Marie	CE	2.00	\$500.00
need-500	Sullivan	Sean	Colin	ME	2.00	\$500.00

