Please use this form to request technology fee expenditures for equipment in classrooms, computer laboratories, or other instructional or research laboratories, in keeping with the State Board of Agriculture Charges for Technology Manual guidelines found at http://www.colostate.edu/services/acns/ietc/fee.html. Technology committee members are available for assistance, the names of whom appear in Section IV. Also see Section IV for submission information.

Section I. Overview

1. Title of proposal

   Undergraduate computer workstation replacement, Glover Building.

2. Submitted by (Name & contact information of primary submitter(s) – up to three)

   Timothy R. Gonzales
   Research Associate / Lab Mgr.

3. Proposal supported by*

   Dr. Vince Murphy
   Acting Dept. Head, CBE

* Proposals with wide-spread support from a cross-section of the college will be given preference. Although this form may be submitted electronically with a list of supporters, actual signatures are required for all supporters beyond the original submitter(s).

4. This project request is
   □ for student wages
   □ for software
   X to maintain and/or upgrade existing facilities (replacement equipment only requested)
   □ to augment and maintain existing facilities (some new equipment requested)
   □ to provide a new facility (all new equipment requested)

5. Brief summary of proposal (Please limit answer to no more than one paragraph)

   Replace obsolete undergraduate computer workstations in Unit Operations Lab (2), for data acquisition UnitOps (2), and in the Chem-E Student lounge (2), Glover 116.

6. Location for proposed equipment or software:

   Glover 146 Unit Operations Lab and Glover 116, Chem-E student Lounge.

Equipment/Software requested (complete only if proposal is for equipment and/or software):

   Six (6) Pentium III computer workstations (Omit Monitors), (2) Data acquisition interface cards, as specified by current ENS general lab hardware standard.
<table>
<thead>
<tr>
<th>Specific equipment needed</th>
<th>Number Requested</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium III workstation</td>
<td>6</td>
<td>$1369.00</td>
<td>$ 8214.00</td>
</tr>
<tr>
<td>LabView Data Acquisition cards &amp; interface</td>
<td>2</td>
<td>$1500.00</td>
<td>$ 3000.00</td>
</tr>
<tr>
<td>* Sun 19” Monitor</td>
<td>6</td>
<td>$ 240.00</td>
<td>* $ 1,440.00</td>
</tr>
<tr>
<td>Specific software needed</td>
<td>Number Requested</td>
<td>Unit Cost</td>
<td>Total Cost</td>
</tr>
<tr>
<td>LabView</td>
<td>2</td>
<td>ENS Site</td>
<td>$ 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>License</td>
<td></td>
</tr>
</tbody>
</table>

- Monitors were purchased out of CBE allocation prior to
- Proposal process. If approved, will CBE fund be reimbursed?

Total cost: $11,214.00

* $12,680.00 W/ Sun Monitors
Section II. Pedagogical considerations

1. What are the pedagogical goals of this proposal? (Please limit answer to no more than three paragraphs)

   The pedagogical goal of this proposal is to maintain the current standards of quality in the undergraduate engineering program.

2. Why is the request appropriate for the goals stated in #1, above? (complete only if proposal is for equipment and/or software):

   Existing workstations are over 4 years old and have exceeded the manufacturers expected service life.

3. Planned course/research benefit:

<table>
<thead>
<tr>
<th>Course No./Research projects</th>
<th>Number of students affected/semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>All CBE Undergraduate courses</td>
<td>145</td>
</tr>
<tr>
<td>All College of Engineering Undergraduate courses</td>
<td></td>
</tr>
</tbody>
</table>

4. How will this proposal improve instruction (specific lessons, experiments, exercises affected, etc.)? (Please limit answer to no more than three paragraphs)

   Replacement of these computer workstations will bring the level of computing technology up to the current standard as specified by ENS for Engineering General Labs.
Section III. Operation, Maintenance, and Funding

1. What functionality will this equipment provide that is not already available elsewhere in the college?

   This new hardware will MAINTAIN the current level of student access.

2. How many hours per week (M-F, between 7am and midnight) will this equipment be accessible for general student use? (complete only if proposal is for equipment and/or software)

   Accessible 18hrs a day seven days a week in the ENS general labs.

3. How will students be made aware of this project? (complete only if proposal is for equipment and/or software)

   ENS and CBE ENGRDOM home web page.

4. Complete either A or B:

   A. If this request is for student employee wages, who will be the supervisor of those students?
   (the supervisor must sign here if name does not appear in Section I, #2 or #3)

   B. If this request is not for student employee wages, who will be responsible for oversight and any installation, ongoing maintenance, or repair for this project?
   (the responsible party must sign here if name does not appear in Section I, #2 or #3)

   Timothy R. Gonzales, Research Associate AND The technicians and staff of Colorado State

5. What operation & maintenance services would be needed from ENS staff? from department staff?

   Operation and maintenance service will remain at current level (1 student hourly tech, 8 hrs./week)

6. What modifications of current space will be necessary to install the new equipment (remodeling, wiring, security, furniture, etc.) and what is the source of funding for those modifications?

   None.

7. What is the estimated cost of operational expenses (supplies, maintenance, supervision, student assistance, etc.) and how will those expenses be funded?

   Same as current and as provided by current ENS budget.

8. What other sources of funding (and how much) exist for this project (outside grants, equipment donations, reallocation of existing equipment, etc.)?

   None.

9. What attempts have been made to obtain the funding from other sources?

   None.