Engineering Student Technology Committee
Technology Fee Project Proposal
*Must be submitted on or before April 14, 2000*

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/itec/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. Project Type
   - ☑ departmental project (requested against departmental fund allocation)
   - ☑ other project (may be for a single department or college-wide, but request is against central funds) ($83,000 is available for other projects; see department heads for department allocation amounts.)

2. Title of proposal

Computer Infusion to Instruction Labs

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

Timothy W. Tong, ME

4. Proposal supported by*

Timothy W. Tong, ME 

* 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).

5. This project request
   - ☑ does not pertain to facilities or equipment
   - ☑ is to maintain and/or upgrade existing facilities (replacement equipment only requested)
   - ☑ is to augment and maintain existing facilities (some new equipment requested)
   - ☑ is to provide a new facility (all new equipment requested)

6. Brief summary of proposal (Please limit answer to no more than three paragraphs)

The ME department has not had an opportunity to infuse new computers into the teaching labs for several years. Many of the computers we are using are old 486's. In an attempt to decontaminate some of the computers during the building reoccupation process, we have lost several computers due to unintended damages. The new computers requested will replace some of the old computers and also the damaged computers. They will improve a great deal the learning environment for our students.

7. Location for proposed equipment:

   Two computers in each of the following labs:
   - Materials Lab, Engrg. B07
   - Senior Design Lab, Engrg. A08
   - RAM Lab, Engrg. B06
   - Thermofluids Lab, Engrg. A04
   - Mechatronics Lab, Engrg. B107
   - Advanced Dynamics Lab, Engrg. B08
8. Equipment requested (complete only if proposal is for equipment and/or software):

<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>Computers, Pentium III 500 Hz or above</td>
<td>17</td>
<td>$2,000</td>
<td>$34,000</td>
</tr>
<tr>
<td>with 128 MB Ram</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific software needed</th>
<th>number requested</th>
<th>unit cost</th>
<th>total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Total cost: $34,000
Section II. Pedagogical considerations

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

   Students doing laboratory work often need to have access to design software, materials selection software, and other computer tools.

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

   The computers will enable students to gain access to software where the software is needed.

3. How will the attainment of the goals in #1, above, be measured and who will do the measuring?

   measure: use in ME331, ME338, ME307, ME324, ME417, ME463, ME486a, ME486b, ME514, ME524, ME531, ME564, ME676
   measurer: Instructors of these courses.

4. 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>ME331</td>
<td>45/semester</td>
</tr>
<tr>
<td>ME338</td>
<td>45/semester</td>
</tr>
<tr>
<td>ME307</td>
<td>90/year</td>
</tr>
<tr>
<td>ME324</td>
<td>85/year</td>
</tr>
<tr>
<td>ME417</td>
<td>35/year</td>
</tr>
<tr>
<td>ME463</td>
<td>35/year</td>
</tr>
<tr>
<td>ME486a</td>
<td>80/year</td>
</tr>
<tr>
<td>ME486b</td>
<td>80/year</td>
</tr>
<tr>
<td>ME514</td>
<td>7/year</td>
</tr>
<tr>
<td>ME524</td>
<td>10/year</td>
</tr>
<tr>
<td>ME531</td>
<td>15/year</td>
</tr>
<tr>
<td>ME564</td>
<td>7/year</td>
</tr>
<tr>
<td>ME676</td>
<td>7/year</td>
</tr>
</tbody>
</table>

5. What other courses/departments in the college will be able to use this facility for instructional use? (complete only if proposal is for equipment and/or software)

   With permission by the department, staff and students from other engineering departments.

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

   The computers are site specific. They will be used where they are needed.
7. 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)

Available during working hours (M-F, 8am-5pm).

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

Through courses listed in 4 above.
Section III. Operation, Maintenance, and Funding

1. 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 for 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)

   \textit{oversight}: Dave Dummer

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

   From time to time, ENS staff will be needed to coordinate with Dave Dummer for regular maintenance of the computers.

3. What modifications of current space will be necessary to install the new equipment? (remodeling, wiring, security, furniture, etc.)

   none

4. Source of funding for the modifications in #3, above:

5. Estimated cost of operational expenses (supplies, maintenance, supervision, student assistance, etc.):

   none

6. Source of funding for the expenses in #5, above:

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

   none

8. What attempts been made to obtain the funds in #7, above?