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# Engineering Student Technology Committee Technology Fee Project Proposal Must be submitted on or before February 9, 2001

10/7

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 <a href="http://www.colostate.edu/services/acns/itec/fee.html">http://www.colostate.edu/services/acns/itec/fee.html</a>. 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 proposa	1.	Title	of	pro	posa
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License renewal (30 copies) for Aspen Plus 10.1 (July 15, 2001 – July 15, 2002).

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

Timothy R. Gonzales Research Associate / Lab Mgr. Dept. of Chem. & Bio. Eng.

3. Proposal supported by\*

Dr. Vince Murphy Acting Dept. Head, CBE

## 4. This project request is

for	student	wages
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X for software

- □ 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)

Aspen Plus 10.1 is a process modeling program used for senior level design courses in the Department of Chemical & Bioresource Engineering. The renewal of this license is critical to the continued success of our undergraduate program.

# 6. Location for proposed equipment or software:

Aspen Plus 10.1 is to be used in the Process Controls Lab B109 for teaching purposes and on workstations located in the Glover 146c computer lab, Glover 146 UnitOps Lab and Chem-E Student Lounge for homework and group study.

6a. Equipment/Software requested (complete only if proposal is for equipment and/or software):

ASPEN PLUS 10.1 SiteID CSTU-PC Sales order 1428 (30 copies windows platform)

<sup>\*</sup> 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).

Specific equipment needed	Number Requested	Unit Cost	Total Cost
Specific software needed	Number Requested	Unit Cost	Total Cost
Aspen Plus 10.1 July 15, 2001- July 15, 2002	30 copies/year	N/A	\$4,000.00

Total cost: \$4,000.00

#### 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):

This request is appropriate due to the fact that the software license must be renewed yearly. The current license expires in July, 2001.

3. Planned course/research benefit:

Course No./Research projects	Number of students affected/semester
CB341	35
CB452	33

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

The use of this advanced computer modeling program has and will continue to enable the Dept. of Chem. & Bio. Eng. To maintain the quality standards measured by ABET.

#### Section III. Operation, Maintenance, and Funding

- 1. What functionality will this equipment provide that is not already available elsewhere in the college?
- Aspen Plus 10.1 license renewal will MAINTAIN the current level of student access to the modeling software. Aspen Plus 10.1 is specifically designed for problem solving in chemical engineering.
- 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 Dept. of Chem. & Bio. Eng.

    University Engineering Network Services
- 5. What operation & maintenance services would be needed from ENS staff? from department staff?

Aside from troubleshooting any unforeseen problems or dongle failure, none. This modeling software has been very trouble free after initial installation and debug.

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? Unknown.