

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

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. Title of proposal

Replacement NT Workstations and Equipment for the GIS Engineering Design Lab

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

John Labadie, Professor, Dept. of Civil Engineering

3. Proposal supported by*

Department of Civil Engineering

* 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
- 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)

3 of the NT Workstations in the GIS Engineering Design Lab include outdated processors, limited memory, and limited harddrive space. These Workstations need to be upgraded to provide the processing capability of the newest GIS software provided by the ESRI Site License for use in the Lab. In addition, hard drive capacity and display monitors need to be upgraded for 5 of the NT Workstations in the Lab in order to support the newest ESRI GIS software.

6. Location for proposed equipment or software:

The GIS Engineering Design Lab, rm C205 Engineering

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

Specific equipment needed	Number Requested	Unit Cost	Total Cost
High end NT Workstations (AMD Athlon 1GHz)	3	\$2200	\$6600
30 GB EIDE hard drives	5	\$110	\$550
HP A4033A 20" monitors	5	\$425	\$2125
Specific software needed	Number Requested	Unit Cost	Total Cost

Total cost: **\$9275**

Section II. Pedagogical considerations

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

The GIS Engineering Design Lab is unique on the CSU campus in providing a Windows NT-based teaching and research laboratory for application of GIS to civil and environmental engineering. The goal of this proposal is to enhance the use of the Lab for undergraduate courses such as CE 208 and CE 309 for introducing CE students to the latest and most powerful GIS software by upgrading the processing display capabilities of the NT Workstations in the Lab

2. Why is the request appropriate for the goals stated in #1, above?

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

This proposal will provide the necessary upgrading of the NT Workstations in the GIS Engineering Design Lab that will accommodate the increased computing and display requirements of the latest and most advanced GIS software.

3. Planned course/research benefit:

<u>Course No./Research projects</u>	<u>Number of students affected/semester</u>
CE 577	20
CE 645	10
CB 542	20
CE 546	12
CE 208, CE 309 [GIS support]	75
CE 703	8

4. How will this proposal improve instruction (specific lessons, experiments, exercises affected, etc.)?

(Please limit answer to no more than three paragraphs)

Among all the GIS laboratories across the CSU campus, the GIS Engineering Design Lab is the only one providing Windows NT-based computing platforms for applications of GIS. Most other sites employing ESRI ArcInfo software are still utilizing UNIX workstation implementations which are difficult for students to learn and be productive on. Upgrading of some of the NT Workstations in the Lab is required in order to fully accommodate the power of the latest, advanced GIS software that is licensed for the Lab.

Section III. Operation, Maintenance, and Funding

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

The GIS Engineering Design Lab is unique in the College of 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)

24 hrs. per day, 7 days per week

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

Students will be made aware by the continuing functioning of the GIS Engineering Design Lab.

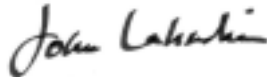
4. Complete either A or B:

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)

John W. Labadie



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

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?

NA

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

NA

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

ENS staff will help install and maintain the software in the GIS Engineering Design Lab through staff positions supported by funds from the Civil Engineering Dept.

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