WEEF Proposals: Winter 95

	Item	Amount	Department	Contact
	Chem Eng WATSTAR MAD disk	837	Chem Eng	D. Herman 5 No-Show
	Chem Eng WATSTAR Facility	6027	Chem Eng	D. Herman
	Chem Eng ChE 040 Laboratory Upgrade	8250	Chem Eng	Dr. P. Silveston Derrick Jewlal
	Watstar Drive	1720	E&CE	Bernie Roehl
	Upgrades to circuits lab	3600	E&CE	Eric Praetzel
	Expansion of Sunee Facility	6671	E&CE	B. Roehl
2	Control Systems Experiment Station	12361	Sys Des	Glenn Heppler
	HP LaserJet IVsi	4000	Sys Des	Michael Zuliani
	Watstar Ergonomic Upgrade	9000	~~Sys Des~~ Gone	Michael Zuliani
	Watstar Room Upgrade	2250	Sys Des	Michael Zuliani
	Microcomputer Workstation	4450	Sys Des	Micael Zuliani
	~~Computer terminal increase~~	~~2000-3000~~	~~Civil~~	~~Kevin Fergin~~
	MAD(Monster Application Disk)	980	Civil	Peter Pan
	Portable Multi-Purpose Building Science test facility	4800	Civil	Dr. E.F.P. Burnett
	Sedimentation Tank	1550	Civil	Mark Sobon
	Incubator → surplus	4325	Civil	Bruce Stickney
	Filter Domes	2319	Civil	Bruce Stickney
	Drying Oven	4089	Civil	Bruce Stickney
	Field Spectrophotometer	2965	Civil	Bruce Stickney
	Dissolved Oxygen Electrode	710	Civil	Bruce Stickney
	UV/VIS Spectrophotometer	2902	Civil	Bruce Stickney
	Fluid Mechanics Experiment Upgrade	3032	Civil	T. Ridgway
	Classroom visual projection/presentation system	9400	Mech Eng	M. Kaptein
	Watstar Server	1800	Mech Eng	M. Kaptein
	Monitors for ACAD stations	4600	Mech Eng	M. Kaptein
	Manufacturing Videotapes	800	Mech Eng	Michael Falconer
	Midnight Sun	10000	Project	Dr. Savage Dave Walsh
	BEAM International Robotics Competition	1459.21	Project	Kapley Judge
	Formual SAE	2116	Project	Stuart Dunn
	~~National Debating and Public Speaking Tournamer~~	~~300/team~~	~~Project~~	~~Rod Cave~~
	IEEE Disk Server Hard Drive Upgrade	550	Project	IEEE student branch
	Injection Molding Machine Design	4800	Project	Dave Smith Rob Rady-Pentek
3	TV monitor	1500+	Gen E	Mark Ritchie
/	CCES '96 Project Magazine Funding	5000	Gen E	Piyush Bhatnagar

WEEF Proposal Form

Winter 1995

Proposal Title: Chem Eng WATSTAR MAD disk

Submitted by: D. HERMAN Phone Number: 2196

Position (Student, Professor, Organization, etc.): Staff

Description of Proposal:

WATSTAR now requires that all servers purchase a 1 Gigabyte hard disk to contain all public software. This proposal requests the purchase of a 1 Gigabyte MAD disk for the chemical engineering WATSTAR Server.

Benefits of the Proposal (including number of department(s) and students affected):

(1) Availability of the latest Microsoft and other WATSTAR licensed software to all chemical engineering students.
(2) Simplified WATSTAR public software administration.

Cost Breakdown of Proposal (including partial funding options if desired):

(1)	Seagate ST 31200N Hard Drive 1Gig	$ 792
(2)	1 SCSI Cable. (3 connectors)	$ 30
(3)	1 FAN	$ 15
		$ 837

Implementation Schedule for Project:

W95

Additional Information:

Please submit to WEEF mailbox in the Office by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: Chem Eng Undergrad WATSTAR Facility Cont'd

Submitted by: D. HERMAN Phone Number: 2196

Position (Student, Professor, Organization, etc.): Staff

Description of Proposal:

This proposal is the continuation of a previous proposal to provide WATSTAR computing facilities to chemical engineering undergraduates. The original proposal was granted funds for upgrades to existing WATSTAR stations and 2 additional stations. This current proposal would like to request the purchase of 3 additional WATSTAR stations for this room. EI-2532.

Benefits of the Proposal (including number of department(s) and students affected):

① Reduce load on public WATSTAR rooms

② Provide computing facility for 1st, 2nd & 3rd year students

Cost Breakdown of Proposal (including partial funding options if desired):

① 3 - 486 DX2 66 Stations 16 Meg RAM = 3x $2009 = $6027

Implementation Schedule for Project:

W95

Additional Information:

The room can hold 20 Computers and currently holds 8. To fill the room we could purchase 12. 12x $2009 = $24,108

Please submit to WEEF mailbox in the Orifice by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: ChE 040 Laboratory Upgrade: Cyclic CSTR
Submitted by: Dr. P. Silveston/Derrick Jewlal Phone Number: X-2154/X-3813
Position: Professor/Student

Proposal Description:
Upgrade the existing PFR lab equipment to include a new jacketed CSTR, and associated hardware and on-line controls equipment. This includes automated control of reactant flowrates via computer and electronic flow controllers, and on-line HPLC for process data acquisition.

Benefits of the Proposal:
This lab upgrade will greatly enhance the educational value of two courses in the Chemical Engineering Department. These are ChE 040, the fourth year lab course, and ChE 524, the fourth year Process Control lab course. This proposal will allow students to determine the kinetics and associated advantages of forced cyclic operation of a CSTR, and how to optimally control such a system. These benefits will augment the existing PFR lab already in place, and allow students to directly compare different theoretical reactor designs: batch reactor, continuously stirred tank reactor, and the plug flow reactor. This new format will be superior because individual labs can be designed for each group, reducing the opportunity for copying of labs and data. This will help to provide a solution to the problem of labs being copied and recycled.

Cost Breakdown of Proposal:

CSTR	$ 600	Valves and tubing	$1500
HPLC repair	$ 600	Impeller and motor	$1000
On-line HPLC Link	$1500	Chemical Storage	$ 300
Flow controllers	$3000	Design, build, test	
Temperature Control	$1000	and document	$4500
Computer Interface	$2500	Total Cost $16,500	
		$ 8,250 for 2 Terms	

Partial Option (No automation): $11,500 ~ Bare Minimum

Implementation Schedule for Project:
Design, build and testing complete by December 1995. Available for use in January 96 for ChE 524, 4B term. Available for ChE 040, 4A term in May 96.

Additional Information:
This proposal is based upon the availability of idle HPLC equipment designated for Chem Eng undergraduate labs, reducing the cost of the project by $8-10,000. Also, automation would be completed with a computer supplied by the Chem Eng Department, accounting for approximately $2,500. Also, existing equipment to be recycled is valued at $1,000. Thus the Department is supplying $13,000 to the project as stated.

WEEF Proposal Form

Winter 1995

Proposal Title: Watstar Drive

Submitted by: Bernie Roehl Phone Number: Ext. 2607

Position (Student, Professor, Organization, etc.): E & CE Technical Staff

Description of Proposal:

Purchase an additional 2Gb drive for the E & CE Watstar servers. By moving the other drives, this would add 1Gb to electrical and 1Gb to elcom 2.

Benefits of the Proposal (including number of department(s) and students affected):

This would benefit all E & CE students. The purpose of this additional drive would be to allow the installation of more application software and provide additional user disk space.

Reduce Access Times

Cost Breakdown of Proposal (including partial funding options if desired):

Find out from Watstar

1 2Gb drive $1,720.00

Implementation Schedule for Project:

Drive would be installed immediately.

Additional Information:

Please submit to WEEF mailbox in the Orifice by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: Upgrading first and second year circuits lab

Submitted by: Eric Praetzel Phone Number: Ext. 5249

Position (Student, Professor, Organization, etc.): E & CE Technical Staff

Description of Proposal:

Completion of instrumentation purchases for the circuits laboratory. This proposal involves the purchase of five digital multimeters and three decade resistance units.

Benefits of the Proposal (including number of department(s) and students affected):

This would complete the upgrading of all test stations so that all students would have the same equipment types to work with.

Cost Breakdown of Proposal (including partial funding options if desired):

The digital multimeters are $600.00 each.

The decade resistance units are $200.00 each

The cost of 5 digital multimeters is $3,000.00

The cost of 3 decade resistance units is $600.00.

Funding for a smaller number of units would be quite acceptable.

Implementation Schedule for Project:

All items would be placed in the lab as soon as they are received.

Additional Information:

Please submit to WEEF mailbox in the Orifice by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: Expansion of Sunee Facility

Submitted by: B. Roehl Phone Number: Ext. 2067

Position (Student, Professor, Organization, etc.): staff

Description of Proposal:

Purchase one SUN SPARK station5 workstation to expand the sunee lab facility. An increasing number of undergraduate courses require UNIX based software. This expansion is necessary to accommodate these students.

Benefits of the Proposal (including number of department(s) and students affected):

This workstation would be used in the following electrical and/or computer engineering courses: Fall: ECE 427, ECE 450, Winter: ECE 427, ECE 354 Spring: ECE 455, ECE 450. Availability: All 4th year E & CE students get account on the system, as well as all people taking the courses using the system. 24 hour access (combination lock on door).

Cost Breakdown of Proposal (including partial funding options if desired):

Partial Funding Possible

One SUN SPARK station5 workstation $6,671.00

Implementation Schedule for Project:

Workstation would be installed immediately.

Additional Information:

Please submit to WEEF mailbox in the Orifice by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: Control Systems Experiment Station

Submitted by: Glenn Heppler Phone Number: x4648

Position (Student, Professor, Organization, etc.): Professor, Systems Design

Description of Proposal:

The experimental apparatus used in SD 352 is inadequate and needs to be replaced. A system which is a strong candidate for outfitting the lab has been identified. I wish to purchase one of these units for evaluation purposes and also for use as a mobile demonstration facility to be used in lectures.

Benefits of the Proposal (including number of department(s) and students affected):

The single unit that I am asking WEEF to fund can be used in the first control systems courses in Electrical engineering, computer engineering, mechanical engineering and Systems design engineering for a total of six classes (~ 420 students) per year. It will provide a much needed teaching aid and will give us an opportunity to assess it for use in the laboratory.

Cost Breakdown of Proposal (including partial funding options if desired):

Educational Control Products Model 205 - $7850 US +
Optional serial disk and encoder $570 US +
UPS shipping $85 US. = $8525 US x 1.45 = $12,361 Can.
The system requires a PC to act as an interface between the user and the control apparatus. The PC will be obtained from other sources.

Implementation Schedule for Project:

As soon as I get approval I can order the equipment. It should be operational for the Fall '95 term.

Additional Information:

Please submit to WEEF mailbox in the Office by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: Watstar printer upgrade
Submitted by: Michael Zuliani Phone Number: (519) 747-3303
Position: Student (SY DE '96)

Description of Proposal:

Watstar laser printer upgrade for the DASL lab. (CPH 1335)
Replace the dot-matrix printer in the DASL lab that is used for printing from the "Systems" Watstar server.

Benefits of the Proposal (including number of department(s) and students affected):

- Systems design department (and other Engineering departments.)
- Directly affects about 240 Systems students.
- Eliminate noisy and slow dot-matrix printer
- Will reduce the load on the other Watstar laser printers.
- Will save paper, since multiple "pages" can be printed on one piece of paper.

Cost Breakdown of Proposal (including partial funding options if desired):

Item	Quantity	Unit Cost	Total
HP LaserJet IVsi	1	$ 4,000.00	$ 4,000.00

Implementation Schedule for Project

As soon as funding is available, the laser printer can be purchased, then installed.

Additional Information

WEEF Proposal Form

Winter 1995

Proposal Title: Watstar ergonomic upgrade
Submitted by: Michael Zuliani Phone Number: (519) 747-3303
Position: Student (SY DE '96)

Description of Proposal:

Watstar upgrade
New tables with adjustable keyboard height for the Watstar rooms in E2-1308 and E2-1302, similar to the ones in GAFF and EL-108.

Benefits of the Proposal (including number of department(s) and students affected)

- All Engineering departments
- All engineering students (Watstar users)

Engineering students spend many hours on the Watstar computers. The keyboards in E2-1308 and E2-1302 are much too high for safe and comfortable computer use. Tables with adjustable keyboard shelves would place the keyboard at an appropriate height. Palm rests incorporated on the shelves would reduce the risk of injury and improve comfort.

Cost Breakdown of Proposal (including partial funding options if desired):

Item	Quantity	Unit Cost	Total
Custom computer table	20	$ 450.00	$ 9,000.00

Note, the actual cost of each table depends on its design.
(Shelves retrofitted to the existing tables could be less expensive.)
For partial funding: reduce the quantity of tables.

Implementation Schedule for Project

As soon as funding is available, the tables can be designed, constructed and then installed.

Additional Information:

The estimate was provided by the engineering machine shop, who manufactured the existing tables in GAFF and EL-108. The actual design of the tables can be altered from the existing one so that they will fit in E2-1308 and E2-1302 and have a reasonable cost.

WEEF Proposal Form
WINTER 1995

Proposal Title: MAD (Monster Application Disk) for Civil WATSTAR Server

Submitted by: Peter Pan **Phone Number:** 3674

Position: Computer Systems Manager **Date of Submission:** 95.01.28

Description of Proposal: A new plan is being developed by the WATSTAR Development Group to improve the efficiency for accessing and managing application software on the WATSTAR network. This will necessitate an increase of approximately 1 G.B. of hard disk on the Civil Server.

Benefits of the Proposal: All Civil undergraduates and students from other Departments taking Civil courses will benefit from this upgrade to the WATSTAR Server.

Cost Breakdown of Proposal: $980.

Implementation Schedule for Project: March or April, 1995.

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: _____ Date: Jan. 30 1995
P.Pan

Department Approval

Every proposal must be reviewed by the appropriate Department Head. This is done to insure that the departments are well informed, and have the opportunity to voice their opinion about proposals being presented to the WEEF Funding Council.

The following section is to be completed by the appropriate Department Head.

Name: Dr. B.G. Hutchinson
Position: Chair, Civil Engineering
Phone: Ext. 2160

Proposal approved: _____ Dated: Feb. 2/95
B.G. Hutchinson

If this proposal has not been approved, please indicate the reasons below:

WEEF Proposal Form
WINTER 1995

Proposal Title: Portable Multi-Purpose Test Facility

Submitted by: Dr. E.F.P. Burnett **Phone Number:** 2174

Position: Professor, Civil Engineering **Date of Submission:** 95.01.28

Description of Proposal: To build a portable test facility to establish one or more of the following: air tightness (air leakage) characteristics, rain/water tightness, and/or structural response of building assemblies or sub-assemblies such as cladding, windows, facades, veneers or screens, or complete wall or roof assemblies. Portability is an important feature to enable us to demonstrate or conduct testing of roofs (uplift, air and rain), walls, doors (industrial) and even dwellings or portions of buildings.

Benefits of the Proposal: At least two faculty members, both involved in Building Technology, will make use of this facility. Professor Burnett will utilize it for Civ.E. 407 (Building Science Technology) and also the related Graduate course (Civ.E. 707). Professor R. Schuster, who has courses in Civil Engineering and Architecture, will use it for demonstration as well as testing purposes (Arch 276, 362 and Civ.E. 703).Enrolment in Civ.E. 407 (Winter Term) is usually between 20 and 30 students drawn from Civil Engineering plus some Mechanical Engineering and Architecture students who choose to do this course in 4B.

Air and moisture are two of the most significant loadings that a building has to accommodate. Prior to 4B, this reality is not acknowledged. There is a need for a demonstration tool and a hands-on test facility. This versatile equipment could also be used by other faculty members and/or students for project courses (Civ.E. 300 and Civ.E. 400).

All components are readily available and we will design and assemble the facility on campus.

Cost Breakdown of Proposal:

Blower Fan and Motor	$ 350
Analog Meters	$ 600
Controls	$ 300
Water Flow and Pressure Gauges	$ 350
Sparge Rack Distribution System for Water including Water Pump, Nozzles, etc.	$ 650
Air Flow Rate and Pressure Meters (Low and High Pressure)	$ 750
Plumbing, Valves, etc.	$ 300
Storage Unit	$ 200
Labour (development, fabricate, calibrate, etc.)	$1300
Total:	$4800

Implementation Schedule for Project:

Immediately.

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: _____ Date: January 28, 1995

E.Burnett

WEEF Proposal Form
WINTER 1995

Proposal Title: Sedimentation Tank

Submitted by: Mark Sobon **Phone Number:** 5263

Position: Technologist, Water Resources /Environmental Engineering **Date of Submission:** 95.01.28

Description of Proposal: Repairs to an existing sedimentation tank by the Engineering Machine Shop.

Benefits of the Proposal: For the Civ.E. 375 (Water Quality Engineering) labs (Spring/Winter Terms) and project courses Civ.E. 300/400 - approximately 240 students p.a. This tank is used in Civ.E. 375 for coagulation and sedimentation experiments to construct settling rate curves for analysis purposes.

Cost Breakdown of Proposal:

Materials	$1050
Labour	$ 500
Total:	$1550.

Implementation Schedule: Immediately.

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: for M. Sobon Date:

WEEF Proposal Form

Winter 1995

Proposal Title: INCUBATOR

Submitted by: Bruce Stickney **Phone Number:** 2908

Position: Water Resources Group
Civil Engineering **Date of Submission:** 95.01.23

Description of Proposal: Replacement Incubator for a 33 year-old unit which needs a new refrigeration compressor. The unit is being used for high temperature incubation only (eg.- greater than 25 deg. C.) however with the large class sizes (Civ. E. 375 and 472) over the past 2 years it is necessary that we replace this now with a unit which can provide stable temperatures at or below room temperature. The proposed unit has a temperature range from -20 to 55 deg. C.

Benefits of the Proposal: This unit is used every term to support Civ.E. 375 and 472 (approx. 275 students p.a.) Laboratories and would have the capability of operating over a wide range of temperatures making it particularly useful for the changing needs of different courses and projects.

Cost Breakdown of Proposal: The propsed unit is an SP Model BOD-50 available from our Systems Contractor @ $ 4325.00

Implementation Schedule for Project: The unit would be installed immediately.

Additional Information: None

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: Bruce Stickney Date: Jan 30/95

B. Stickney

WEEF Proposal Form

Winter 1995

Proposal Title: FILTER DOMES (3)

Submitted by: Bruce Stickney **Phone Number:** 2908

Position: Water Resources Group
Civil Engineering **Date of Submission:** 95.01.23

Description of Proposal: Pyrex glass Filter Domes are used for Solids Determination when Filtrate needs to be recovered. The units provide for collection of Filtrate into sample containers without the need for additional transfers which speeds up work and reduces the chances for Sample contamination or carry-over.

Benefits of the Proposal: These units would replace four old units which are constructed of Acrylic. The Acrylic units age from UV light and Solvent Vapours and have been replaced about every five years. New glass units eliminate this problem while maintaining visibilty of sample collection, so necessary for this type of work. The units would be used in Civ.E. 472, in Civ.E. 126, 300, and 400 Projects and Environmental Engineering Courses benefitting 200 students p.a.

Cost Breakdown of Proposal: Fisher Sci. Quote #425259, $ 773./ea. TOTAL $ 2319.00.

Implementation Schedule for Project: Immediate for Civ.E. courses involving 150 students p.a.

Additional Information: None

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: B. Stickney Date: Jan 30/95.

WEEF Proposal Form

Winter 1995

Proposal Title: Field Spectrophotometer

Submitted by: Bruce Stickney **Phone Number:** 2908

Position: Water Resources Group
Civil Engineering **Date of Submission:** 95.01.23

Description of Proposal: This is a portable unit widely used for Project work because of its' capability of use in field measurements. It operates on batteries or on line current and can then be used on a bench in the lab. There is currently one of these units in our lab. and this would give us a second much needed unit.

Benefits of the Proposal: Students in Civ.E. 472 and other Project work use these almost exclusively for their Colourimetric Analyses (approx. 120 students p.a.) This unit is compatible with another unit, which is very often in use, and would not require using different instruments for field and lab. use, this being tedious because of additional calibration, and learning operation of several different units.

Cost Breakdown of Proposal: $ 2965.00

Implementation Schedule for Project: Immediate.

Additional Information: None

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: R. Bruce Stickney Date: Jan. 30/95

B.Stickney

WEEF Proposal Form

Winter 1995

Proposal Title: Dissolved Oxygen Electrode

Submitted by: Bruce Stickney **Phone Number:** 2908

Position: Water Resources Group
Civil Engineering **Date of Submission:** 95.01.23

Description of Proposal: This would replace a broken electrode from Fall 94. These are used in Civ.E. 375 for both field and in-lab. measurements of dissolved oxygen in water. This is also the basis of the Biochemical Oxygen Demand (BOD) test done on water to assess overall water quality in this course.

Benefits of the Proposal: This would allow the use of one additional meter for BOD Determination where we normally have lengthy waits for equipment. This electrode would be compatible with all our existing meters and would allow use of all existing equipment.

Cost Breakdown of Proposal: $ 710.00

Implementation Schedule for Project: Immediate.

Additional Information: None.

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: Bruce Stickney Date: Jan. 30/95
B.Stickney

WEEF Proposal Form

Winter 1995

Proposal Title: UV/VIS SPECTROPHOTOMETER

Submitted by: Bruce Stickney **Phone Number:** 2908

Position: Environmental Group
Civil Engineering **Date of Submission:** 95.01.23

Description of Proposal:

The proposed replacement would have a multifunction digital display with an analog output compatible with existing data aquisition equipment for continuous monitoring. These instruments are widely used for Colourimetric Analyses and in our courses for visible tracer studies in reactor characterization.

Benefits of the Proposal:

Several of these units are used and this would be the same as two others in the laboratory, simplifying instruction in the operation and results retrieval. The unit would be used in Civ.E. 375 and 472 (approx. 275 students p.a.). The continuous monitoring capability would be especially useful in Civ.E. 472 because of the great length of experiments (ie. 7 days). This aquisition would bring all our Spectrophotometers up to current standards.

Cost Breakdown of Proposal:

Milton-Roy Spectronic 20D $ 2902.
Complete with Flow-thru Cell HACH # 45215

Implementation Schedule for Project:

This unit would be placed in service immediately upon receipt, presumably for the Spring term 1995.

Additional Information: None

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: A. Bruce Stickney Date: Jan 30/95.
B. Stickney

WEEF Proposal Form
WINTER 1995

Proposal Title: Fluid Mechanics Experiment Upgrade - Portable Beam Scales.

Submitted by: T. Ridgway **Phone Number:** 3042

Position: Technologist **Date of Submission:** 95.01.28

Description of Proposal: Upgrade existing beam balances from imperial to S.I. in the Fluids Lab for consistency with other lab equipment.

Benefits of the Proposal: Used in Civ.E. 280 (Fluid Mechanics and Thermal Sciences) and CH E 025 (Transport Processes 2 - Fluid Mechanics) (175 students p.a.).

Cost Breakdown of Proposal: Model 4182 (Mettler-Toledo, Inc.) 4 units required @ $758/unit - total: $3032.

Implementation Schedule for Project: Immediately.

Would partial funding to the cost estimate provided above be acceptable? YES

Submitter Signature: _____ Date: _____
T. Ridgway

Department Approval

Every proposal must be reviewed by the appropriate Department Head. This is done to insure that the departments are well informed, and have the opportunity to voice their opinion about proposals being presented to the WEEF Funding Council.

The following section is to be completed by the appropriate Department Head.

Name: Dr. B.G. Hutchinson
Position: Chair, Civil Engineering
Phone: Ext. 2160

Proposal approved: _____ Dated: 95.02.03
B.G. Hutchinson

If this proposal has not been approved, please indicate the reasons below:

WEEF Proposal Form

Winter 1995

Proposal Title: Computer Terminal Increase.

Submitted by: Kevin Fergin per 2A Civil Phone Number: 894-3062

Position (Student, Professor, Organization, etc.): Student

Description of Proposal:

It is apparent that there is a need for more terminals in the Civil Engineering computer lab. Therefore, an additional computer is desired. ie. Intel 486 DX system.

Benefits of the Proposal (including number of department(s) and students affected):

Because the computer terminal would be in the Civil Engineering only, civil students would have access to it. In addition, less congestion would occur in the other labs, allbe it by one terminal!

Cost Breakdown of Proposal (including partial funding options if desired):

$2000 - $3000

-includes hard drive, processor, ram, cache. keyboard, monitor

Implementation Schedule for Project:

-upon purchase, immediate

Additional Information:

Although the majority of people in the 2A class were in favour of the proposal, many expressed a desire for a upgrade in the server to shorten booting and processing time.

Please submit to WEEF mailbox in the Office by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: CLASSROOM VISUAL PROJECTION/PRESENTATION SYSTEM

Submitted by: M. Kaptein Phone Number: 3026

Position (Student, Professor, Organization, etc.): Director of Laboratories

Description of Proposal:

The Department of Mechanical Engineering is in the process of installing a state of the art, visual presentation system in classroom 2536, E1. It will consist of a computer projection system, a CCD camera (to alleviate the need for the instructor to continuously climb up and down from the lecturing platform and remove the overhead projector out of the line of sight of the class), a VCR and an audio system for the lecture theatre. The estimated cost for this project is $ 18,800. We are requesting part funding of $ 9,400.

Benefits of the Proposal (including number of department(s) and students affected):

ME students in 2A/2B.

Cost Breakdown of Proposal (including partial funding options if desired):

Implementation Schedule for Project

In progress.

Additional Information:

If this works well, we will be interested in placing a similar system in E4-3374 for our 3A/3B classes. It could be a prototype for other departments with dedicated classrooms.

Please submit to WEEF mailbox in the Office by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: WATSTAR SERVER

Submitted by: M. Kaptein Phone Number: 3026

Position (Student, Professor, Organization, etc.): Director of Laboratories

Description of Proposal:

Last term the Department, upon request from the 2A class, has started to put in place a training method for first time ACAD users. This process is continuing, we are, at the moment, trying to obtain 10 ACAD programs, in addition to the 5 the Department has in place. The tutorial sessions will place a heavy burden on the Mechanical Server which has 64 users. The cost of a Watstar Server is estimated to be $3,600.00 (100 MHz 486 with 16 MB memory and 2 GB harddisk). A part funding of $ 1,800.00 is requested for this project.

Benefits of the Proposal (including number of department(s) and students affected):

All of ME students using Watstar system.

Cost Breakdown of Proposal (including partial funding options if desired):

See earlier request.

Implementation Schedule for Project:

March 1995.

Additional Information:

Please submit to WEEF mailbox in the Orifice by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: MONITORS FOR ACAD STATIONS

Submitted by: M. Kaptein Phone Number: 3026

Position (Student, Professor, Organization, etc.): Director of Laboratories

Description of Proposal:

In view of our efforts to provide a training facility for tutorial use in ACAD, it will be an asset to upgrade the Mechanical WatstarComputers in Room 1304, E2, with 17" CAD monitors. The present VGA monitors have been in use for more than 25000 hrs. and will require replacement in the near future regardless. The estimated cost is $9,200. for colour monitors, we are requesting a partial funding of $ 4,600. At the moment, we are having problems with the AUTOCAD licence and we hope these will be ironed out.

Benefits of the Proposal (including number of department(s) and students affected):

All of ME students using WATSTAR system. Especially directed at 1A, 1B, 2A, 2B.

Cost Breakdown of Proposal (including partial funding options if desired):

Purchase of AUTOCAD licence - provided by Department

Preparation of Tutorials and final projected - provided by Department

Cost of resource people - provided by Department

Colour monitors (17") - 50% Department

- 50% WEEF

New Watstar Server - 50% Department

- 50% WEEF (See second request)

Implementation Schedule for Project:

March 1995

Additional Information:

Note this will be a prototype system. If successful, we expect Civil Engineering and System Design to pursue similar systems.

Please submit to WEEF mailbox in the Office by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: Manufacturing Videotapes

Submitted by: Michael Falconer Phone Number: 746-9064

Position (Student, Professor, Organization, etc.): student

Description of Proposal:

The purchase of two videotapes for ME340: (1) Composites (32 min) (2) Lasers (35 min).

These are shown during tutorials to demonstrate manufacturing processes. The new tapes will allow students to see more modern techniques than those currently available in the Mechanical Engineering Department.

Benefits of the Proposal (including number of department(s) and students affected):

It would enhance ME340, Manufacturing Processes, by introducing important, current information on non-metallic materials and some non-traditional manufacturing methods

Cost Breakdown of Proposal (including partial funding options if desired):

Approximate cost of each video: $400

Total funding desired ~ $800

Implementation Schedule for Project:

Effective immediately

Additional Information:

Videos to be purchased from SME by professor J. G. Lenard

see attached

Please submit to WEEF mailbox in the Orifice by Friday February 3.

W E E F Proposal Form

Winter 1995

Proposal Title. Midnight Sun Solar Car Project
Submitted by: Dr. G. Savage, Dave Walsh, **Phone Number:** x2234
Position (Student, Professor, Organization, etc.): Student Project

Description of Proposal:

The Midnight Sun Project is an ongoing project dedicated to educating the public on the environment, alternative energy sources, mathematics, science, and engineering. It is through this education and through SUNRAYCE, that the University of Waterloo will ultimately succeed in solar car design.

The purpose of the Midnight Sun Project is to enable undergraduates, graduates, staff, and faculty to work on a large scale project. From the criteria and constraints established, the team must then develop designs that could satisfy these limitations. Ultimately, the proposed designs must be critiqued and a final optimal design chosen. SUNRAYCE allows for all these stages to be explored. The final design will then be compared to other universitys' in the SUNRAYCE competition to determine the best overall design and team.

Benefits of the Proposal (including number and department(s) of students affected) :

In order to promote both SUNRAYCE and the Midnight Sun, the project team has performed lectures, talks, and demonstrations to the community and local educational system. As well, Midnight Sun has been in the media, local, national, and international, in both print and electronic form. Promoting education, engineering, and the environment is a strong concern for the project, thus making Midnight Sun the ambassadors of engineering more often than any other engineering project.

Within the project team, members can receive academic credit for conducting research, design, and construction of the vehicle. These project courses are Mech 482, Elec 499, SyDe 362, 461, & 462, as well as independent projects through General Engineering. To this date, there have been approximately 35 project courses spanning Engineering and Physics, as well as over **120** students involved at different levels of the project.

The benefit to engineering of a project this size is the fact that it is multi- disciplinary. Engineers from all areas have been involved in the project. In fact, the project should be called a University of Waterloo Project based in Engineering. With this scope, engineering begins to integrate into society.

Cost Breakdown of Proposal (including partial funding options if desired):

The Midnight Sun Team is requesting WEEF to assist in the capital purchase of a motor & controller unit . The motor & controller will serve as the primary propulsion system for the SUNRAYCE 95 vehicle. This unit will be used for future test vehicles and could ultimately be used in the SUNRAYCE 97 vehicle. The total cost of the unit is $10,000. This unit consists of the two items listed below.

Motor	$6285
Controller	$3790

The Midnight Sun Project would accept partial funding for any of the above items. For example

75% funding for Motor would be	$4713
75% funding of Controller would be	$2843

Implementation Schedule for Project:

The Midnight Sun Project is an on-going project that will be completing a new solar car during the next two terms and starting designs for SUNRAYCE 97. The workshops are a continuing aspect to the project enabling students to work in the field of their interest.

WEEF Proposal

Winter 1995

Proposal Title: BEAM International Robotics Competition

Submitted by: Kapley Judge **Phone Number:** (519) 725-2828
Position: Student Mechanical Engineering **Date:** Jan 15, 1995

Description of Proposal:

With international press coverage and competitors from all over the world, the BEAM International Robot Olympics is one of the premier competitions and showcases for robotics technology and innovation. By doing well in these competitions many Institutions, such as MIT, have made a solid name for themselves as leaders in robotics engineering. In the past, the University of Waterloo's performance in this competition has not lived up to it's reputation as the foremost school of engineering in Canada.

In the past two years I have headed a University of Waterloo Team that has entered this competition and finished first (twice) in the Japanese Style Robot Sumo and second in the class North American style class 'A' Robot Sumo competition. This year I would like to obtain funding so that I may once again submit entries for these and three more events.

4-6 People

Benefits of Proposal:

This proposal has the potential to effect all current and potential future University of Waterloo Students. A strong performance at the upcoming competition (April '95) will not only strengthen the reputation of Engineering at the University of Waterloo, but it will also enhance the value of a U of W engineering degree to students and employers as well.

Cost Breakdown: see next page

Implementation Schedule:

The project is currently underway.
Completion of the last Robot is scheduled for April 15, 1995.
Prototypes have already been made for Sumo and Solar Roller Competitions.

Additional Information:

The prototype Solar Roller has a sprint time (8 sec.) that is more than two times better than the current record (22 sec).

Cost Breakdown of Proposal

COMPETITION	DESCRIPTION	QTY	COST	TOTAL
Robot Sumo	1/8 hp DC 50:1 Gear Reduced 12V motors	2	$415.00	$830.00
- Japanese style	12V Heavy Duty lead acid batteries	4	$34.95	$139.80
- no holds barred	12L14 Chain Link Spike Tracks	2	$227.00	$454.00
- North American style	1010 Vblock 1 3/4" pulleys	6	$35.00	$210.00
class 'A'	28.5" custom treated v-belt	4	$24.75	$99.00
Solar Roller	43% efficiency solar cells	2	$27.50	$55.00
	0.47V DC mitsubishi micro motor	2	$21.05	$42.10
Photovore	43% efficiency solar cells	12	$27.50	$330.00
	0.95V DC MIT solar motor	1	$17.67	$17.67
Note:			Sub Total	$2,177.57
All funds have been converted to Canadian Dollars			PST & GST	$2,504.21
Costs do not reflect shipping or customs which can be an additional 5-10%			- current funding	$1,045.00
			Amount of WEEF funding requested	**$1,459.21**

Costs do not include materials and supplies that will be donated by sponsoring companies.
Miscellaneous costs will be covered by myself.
A post competition summary of expenses will be submitted.
I would also like to request 10 WEEF and/or Waterloo Engineering stickers to place on the robots.

WEEF Proposal Form

Winter 1995

Proposal Title: FORMULA SAE DESIGN PROJECT

Submitted by: '95 AND '96 FORMULA SAE TEAMS Phone Number: 894-5799 (STUART DUNN 1995 TEAM MGR.)

Position (Student, Professor, Organization, etc.): SENIOR YEAR STUDENT PROJECT

Description of Proposal:

TO ASSIST THEM IN A TOP FINISH AND THEREBY UPHOLD THE UNIVERSITY OF WATERLOO'S REPUTATION. THE FORMULA SAE TEAM NEEDS FINANCIAL ASSISTANCE. THE ITEMS REQUESTED FOR FUNDING ARE ESSENTIAL FOR OUR CARS' PERFORMANCE AND THE COMPONENTS WE CURRENTLY HAVE ARE NO LONGER USEABLE

Benefits of the Proposal (including number of department(s) and students affected):

- THE 1995 FORMULA SAE TEAM (10 MEMBERS)
- THE 1996 FORMULA SAE TEAM (25 MEMBERS)
- THESE PARTS SHOULD BE USEFUL FOR AT LEAST 3-4 YEARS
- THE UNIVERSITY FOR A TOP FINISHING WOULD REFLECT WELL ON IT
- FORMULA SAE SPONSORS, WHO WOULD BE MORE WILLING AND GENEROUS IN PROVIDING FUNDS FOR FUTURE FSAE TEAMS WHEN INSPIRED BY TOP FINISHES

Cost Breakdown of Proposal (including partial funding options if desired):

ITEM	COST			
WHEELS	520	OPTION 1, $1230	OPTION #2, $1630	OPTION #3, $2116
ZIA STIFFENERS	130			
BRAKE CALIPERS	580			
TURBO KIT	400			
BRAKE DISCS	310			
BRAKE PADS	176			

Implementation Schedule for Project:

ONGOING, COMPETITION ON MAY 18, 1995, AND ANNUALLY IN MAY.

Additional Information:

PLEASE SEE ATTACHED INFORMATION.

PARTIAL FUNDING IS WELCOME

Please submit to WEEF mailbox in the Orifice by Friday February 3.

WEEF Proposal Form

Winter 1995

Proposal Title: National Debating & Public Speaking Tournament

Submitted by: Rod Cave Phone Number: 884-2592

Position (Student, Professor, Organization, etc.): Engineering Communications

Description of Proposal:
Funding for students to attend National championships at Bishop's University, Quebec in March. It is sponsered by CUSID, that national body governing interuniversity debates. This event will culminate a series of interuniversity debates aimed at developing communication skills among participating engineering students.

Benefits of the Proposal (including number of department(s) and students affected):
It will allows students who have shown promise in other debates to strive for better in a competitive atmosphere. These activities contribute to the development of communication skills & the sharing of these nurtured talents Furthermore, it serves as a visible example of the success of engineering students in public speaking to the faculty & world at large.

Cost Breakdown of Proposal (including partial funding options if desired):

Registration	~$150	per team of 2
Transport	$150	
	$300	per team

It would be nice to send more than 1 team & partial funding would be appreciated as well.

Implementation Schedule for Project:
Preperation for event is ongoing while the tournament is scheduled for March 17

Additional Information:
The Student Debating Union is defunct & has no money, while engineering communications has sent people to over 5 interuniversity debates. A participant has placed first in public speaking at the McMaster Invitational while 1 team has consistently placed as one of the top Novice teams. The members of this same team, have also won the SFF debates twice.

Please submit to WEEF mailbox in the Office by Friday February 3.

WEEF Proposal Form
Winter 1995

Proposal Title: IEEE Disk Server Hard Drive Upgrade

Submitted by: IEEE Student Branch Phone Number: X 6955

Position (Student, Professor, Organization, etc.): Organization

Date of Submission: February 3, 1995

Description of Proposal:

The IEEE Student Branch had received approval to set up a disk server on the Watstar network. This server is for those who need extra disk space for their projects or for those who are interested in pursuing **personal projects** (for example, robotics) which require the use of software which the IEEE Student Branch has acquired (for example, PenPoint and Borland C++). The machine that we have set aside for this purpose only has a 120MB SCSI-2 hard drive in place. In order to offer additional and a wider range of software products, the IEEE Student Branch requires the addition of extra hard drive capacity. Therefore, the IEEE Student Branch is asking for WEEF to fund the purchase of a SCSI-2 hard drive with a capacity of 500 MB.

Benefits of the Proposal (including number of department(s) and students affected):

This will immediately benefit the **300 plus** members of the IEEE Student Branch by providing access to software outside the curriculum and extra disk space for any personal or academic projects. Future members will also benefit. Any student at the University is eligible to become an IEEE Student Member.

Cost Breakdown of Proposal (including taxes):

One 500 MB SCSI-2 Hard Drive	$550
Total:	$550

Implementation Schedule for Project:

The server will be setup prior to the end of March, 1995. The hard drive will be attached immediately to the server; the installation will be very straightforward.

Additional Information:

The price of the hard drive is higher than typically advertised prices because the hard drives being advertised the most are of IDE technology. SCSI technology is far superior to IDE for server applications (speed, multitasking, upgradeability, etc.).

WEEF Proposal Form

Winter 1995

Proposal Title: INJECTION MOLDING MACHINE DESIGN & CONSTRUCTION

Submitted by: DAVE SMITH & ROB RADY-PENTEK Phone Number: (905) 529-5132 Ext 353

Position (Student, Professor, Organization, etc.): 4A MECH. ENG. STUDENTS ENROLLED IN ME 482

Description of Proposal:

The objective of this project is to produce a fully automatic injection molding machine capable of molding a variety of plastics and components inexpensively, that is suitable for use with a large range of mold sizes. The design and construction of the injection molding machine will be completed by us, as a two term ME 482 project under the guidance of several faculty members including Professor Schnieder.

Benefits of the Proposal:

The purpose of this project is to create, for the entire faculty of engineering, an accessible injection molding machine that can produce components for use within the faculty. Such components may include a variety of testing specimens required for labs, as well as components required by members of the faculty, graduate projects and other fourth year projects.

Even more beneficial is the possibility of incorporating the injection molding machine as a component of the ME 126 lab (this idea is being reviewed by Professor Schnieder). This would offer the opportunity to introduce a variety of mechanical / electrical systems while at the same time producing tensile test specimens, class keychains, etc. There also exists the possibility for uses in other manufacturing and materials courses as a demonstration or an experimental medium.

It is our intention that this machine be located in an Engineering 3 lab and available to all engineering students, grad students and faculty, interested or involved in work with plastics, mold making, hydraulics etc. We are also attempting to produce a machine that can manufacture components very inexpensively so that the machine could be used on a wide basis (our coffee cup mold cost only $50 to manufacture, a small fraction of the cost of an industrial mold).

Cost Breakdown of Proposal:

A detailed cost breakdown and partial funding option is found on page 2.

Implementation Schedule for Project:

A schedule of work completed and work outstanding is found on page 3

Additional Information:

During the Sept. to Dec. 1994 term , a prototype injection unit was completed along with several molds. Tests with this machine have established both the feasibility of this project and the parameters required for the success of the complete injection molding machine. The prototype was successful in molding more than 40 keychains and 20 coffee mugs.

The prototype machine and /or it's products have been presented to professors Schnieder, Pick, Plumtree, Andrews, Lenard and Davidson. We have consulted with these faculty members and received encouragement and advice on how to proceed..

Various individuals, including several professors and the SAE project team manager have already expressed interest in having components manufactured.

ME 482 INJECTION MOLDING MACHINE BUDGET PROPOSAL

SYSTEM	COMPONENT	EST. COST	BUDGET COST	SOURCE
BASE	RAW MATERIAL	$ 200.00	$ 0.00	Donated By Hibar Systems
MOLD	MOLD HALVES	$ 150.00	$ 150.00	
	FINISHING	$ 100.00	$ 100.00	
	MOLD HEAT/COOL	$ 80.00	$ 80.00	
CLAMP	PLATENS	$ 400.00	$ 400.00	
	TOGGLE	$ 300.00	$ 300.00	
	TIEBARS	$ 300.00	$ 300.00	
	BUSHINGS	$ 100.00	$ 100.00	
INJECTOR	SCREW	$ 200.00	$ 0.00	Donated by Amphenol Corp.
	BARREL	$ 200.00	$ 200.00	
	MOTOR	$ 200.00	$ 0.00	Donated by Hibar Systems
	GEAR REDUCTION	$ 50.00	$ 50.00	
	RAM BEARINGS	$ 30.00	$ 30.00	
	INJECTOR BASE	$ 100.00	$ 100.00	
	NOZZLE/HEATER	$ 100.00	$ 100.00	
	HEATERS	$ 150.00	$ 150.00	
	COOLING	$ 50.00	$ 50.00	
	HOPPER	$ 50.00	$ 50.00	
ELECTRONICS	COMPUTER			
	INTERFACE	$ 200.00	$ 200.00	
	POSITION SENSORS	$ 50.00	$ 50.00	
	THERMAL SENSORS	$ 150.00	$ 0.00	Donated by Wescam Inc.
	ELECTRONICS	$ 200.00	$ 200.00	
HYDRAULICS	LINES/FITTINGS	$ 300.00	$ 300.00 **	See partial funding
	SOLENOIDS	$ 300.00	$ 300.00 **	requirements
	CYLINDERS	$ 600.00	$ 600.00 **	
POWER	TRANSFORMER	$ 50.00	$ 40.00 **	
	WIRE/CONDUIT	$ 150.00	$ 150.00 **	
	CIRCUIT BREAKERS	$ 100.00	$ 100.00 **	
SAFETY	DEADMAN SYSTEM	$ 200.00	$ 200.00	
	GUARDS	$ 200.00	$ 200.00	
MISC	SCREWS/BRACKETS	$ 300.00	$ 300.00	
		$ 5,360.00	$ 4,800.00	

BUDGET REQUIREMENTS

1. Several companies have already donated parts or equipment reducing our estimated cost from $5360.00 to $4800.00 .
   The requested amount for full funding is $4800.

2. We are currently searching for a donor corporation for our hydraulic** and power** systems. If successful this would reduce our costs to $3300.
   The requested amount for partial funding is $3300.

3. If full or partial funding over more than one term is approved it is requested that it be divided evenly between this term (Winter '95) and the term immediately following (Spring '95).

SUMMARY OF WORK COMPLETED

Aug - Dec. 1994 (SCHOOL TERM - 3B)

Goals
- Prototype injector design and construction (to test plastic melt temperature, mold cavity characteristics, injection pressure and basic computer control concepts).

Results
- Successfully designed and manufactured an injector, rudimentary clamp and 3 molds.
- About one-third of the components required for the prototype machine were donated by companies in which the project team members have been employed .
- Successful production of 3 different plastic parts (2 key-chains, 1 coffee mug).
- Preliminary design of the actual machine is underway and investigation into the source and sizing of mechanical and electrical components has commenced.

Conclusion
- From the items that have already been molded, we hoped to have proven the technical feasibility of the project, and that the project team posses the technical and manufacturing knowledge to complete the objectives as outline above.

SUMMARY OF PROPOSED IMPLEMENTATION SCHEDULE

Jan - April 1995 (WORKTERM)

- Submit application for funding to WEEF by deadline.
- Detailed design of complete system including (injector, clamp, computer controls and initial mold).
- Complete manufacture and testing of a 6502 based computer closed-loop control system.
- Component and material selection.
- Budget assessments and update for complete system.
- Find sources that may donate components

May - August 1995 (SCHOOL TERM - 4A)

- Manufacture and procurement of mechanical components (the majority of the budget will be expended during this period).
- Assembly of machine systems.

September - December 1995 (WORK TERM)

- Development.

January - April 1994 (SCHOOL TERM - 4B)

- Redesign where major problems are apparent.
- Machine optimization.
- Exploration of the machines capabilities (plastic types, part size, cycle time).
- Permanent installation.

Date: Tue, 14 Feb 95 09:40:04 EST
From: Mark Ritchie <AVFILM@watdcs.UWaterloo.ca>
Subject: June Lowe's project
To: endowment@helix.watstar.uwaterloo.ca

Greetings Peter,

June Lowe just dropped by and asked me to contact you. She's off to Kenya for 3 weeks today and asked if I would act as a contact for you if you have any questions about the av-link for AutoCAD and C instructional tapes into the WatStar room.

I'd be happy to try to answer whatever questions you might have.

-=-=-=-=-=-=-=-=-

Mark Ritchie | Tel: (519) 888-4070
Media Librarian | Fax: (519) 888-6197
Audio-Visual Centre |
University of Waterloo | Internet: avfilm@watdcs.Uwaterloo.ca

"One of the worst tragedies of life is to see a beautiful theory brutally murdered by a gang of ugly facts." -- La Rochfoucald

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

Peter:
From: "June Lowe" <june@year1.watstar.uwaterloo.ca>
Date: Tue, 14 Feb 1995 09:32:36 EST
To: endowment@HELIX

I still don't have a WEEF form

I know I missed the deadline but I'll try anyway.

I leave for Kenya for 3 weeks tomorrow - how sad, you say!

My Proposal:

A TV monitor: John Vincent of AV has the info on them
max $1000
Remote control installation for a VCR
JV again $600
Installation in the Mechanical Computer Room
$100 to 200 (depending on
whether they have the ceiling in)
. Table/shelf for this $400 (possibly not necessary)
. total < 2200 and probably closer to 1500

AV has video tapes that contain lessons and modules on how to use AUTOCAD
C
PASCAL and probably more.
CORELDRAW
It would be easier for students to learn the packages if they had a computer along side the VCR & Monitor. Since Monitors are cheaper than computers I'm proposing that route.
Mech eng has left an extra spot for a work station in their lab. There would be a sign - similar to the scanner's - asking people to reliquish the terminal for anyone wanting to use the VCR.

I have had quite a few students try to wheel a protable computer into the AV centre - but the is just too much.

Mark Ritchie will present to the committee if I'm not available. Please see him in the AV centre.

Hope you can accept this
June.

WEEF Funding Proposal

Submitter Information

Name : Piyush Bhatnagar
Phone Number : 741-8452
E-Mail Address : pbhatnag@systems
Position : Student

Proposal Information

Title : CCES '96 Project Magazine Funding
Date : February 4, 1995
Type : non-AE&R

Description

The Waterloo delegation, which went to Calgary in 1993, won the bid to host the Canadian Congress of Engineering Students (CCES) in 1996. This annual conference has over 220 delegates representing every engineering school in Canada. This year, and in years to come, we have invited several American schools to participate as well. Our theme for 1996 is *Engineering Education*. We would like to focus on teaching methods (traditional and non-traditional) and communication skills (i.e. public speaking, etc.). These are issues which are becoming more and more relevant as the junction between technological and social individuals becomes less distinct. Engineers must learn to convey their ideas and views more effectively than is currently being done. This can only be achieved through the successful marriage between technology and the people using it.

After every Congress, *Project Magazine* is published. This chronicles the progress made at the conference and throughout the year. The funds required for this magazine are approximately $15000 annually. The magazine is published and available to **every** engineering student in Canada.

Estimated Cost of Proposal

Required : $15000
Proposal from WEEF : $5000

This money is required in the pre- and post-production stages of the magazine.

Potential Beneficiaries

Students : National exposure for Waterloo is positive from several points of view.

Companies look at the work outside of school that we promote more than just academics these days. This type of advertising encourages potential employers to choose Waterloo over others because we have something different.

Not a large proportion of schools have had the opportunity to hold this conference. This will not be our first, not our second, but our third time hosting this conference. This fact alone shows that we have a responsibility to uphold our image as the *premiere* engineering school in Canada.

Faculty : Benefits from the publicity in financial and non-financial ways. They get credit for producing students who are well-rounded and technically sound.

Submitter Signature : 

Date : 95/02/24