

## Materials, Services, Facilities and Technology Fee Fiscal Year 2015-2016 Budget Request Form\*

DUE: Friday, January 9, 2015 @ 5:00 P.M.
Please return completed requests via email to gina.matibag@csuci.edu

If you have questions about this form, please contact Gina Matibag at (805) 437-3320 For additional information please consult the MSFT web page.

Project or Activity Title: Sierra Hall equipment

Name of organization requesting funds:

Date: January 5, 2015

Requestor:

Contact Phone Number: x8542

E-mail:

Amount of MSFT Funding Requested:

Date Funding Needed by: July 2015

Will you receive funds from any other source(s)? X YES NO If yes, please detail amount requesting from other source(s) as well as your total request for fiscal year 2013-2014 (including request from MSFT).

Has this project or activity previously received MSFT funding? NO If yes, please attach copy of report

Please describe how the use of MSFT funds for this project or activity will benefit the CI student body.

Please provide the following in your application. You may attach additional pages and materials (applicants may be requested to meet with the committee to discuss proposals):

1. Brief Project Description. Describe the project and its benefits to the educational or cocurricular experience of students at CI. Please provide specific information about how MSFT funds will be used and their impact on the campus. Please describe how this project benefits CI students? Please describe items and provide justification if your request includes the purchase of computers, equipment, furniture or other materials. Please provide a timeline for implementation of the proposed project. If physical improvements are requested please describe need, scope and impact of work to be completed. If the project includes provision of services please indicate the type of service, personnel costs and level or quantity of service to be provided with project funds. Sierra Hall, which will open in fall 2015 will provide 19 new labs and 4 classrooms. State funds will provide for some, but not all of the equipment needed in these labs. The following are the highest priority lab equipment items from three of the programs that will be located in Sierra Hall that were not able to be funded by the construction project: This proposal is submitted on behalf of three of the lab based programs that will be located in Sierra Hall.

Computer Science – Equipment to provide the basis for a modern networking lab including server blades, switches and router- The purpose of this equipment is to have a Networks lab that can provide a hands on experience for several of our courses: COMP 429 Computer Networks is the obvious candidate, where students can have the experience of working with a real life networks setup. There are several other courses that would be serviced by this lab: COMP/IT 424, the Security course, could use this distributed server in order to implement password breaking procedures, and other cryptographic schemes, and the students could also use it to implement concepts from Big Data / Data Analytics, and other areas, COMP 469 Artificial Intelligence/Neural Nets, and other areas. A powerful server such as this one could be used in order to implement a classroom version of the Google Search Engine, which crawls a (limited) portion of the Internet and builds the corresponding hypergraph. This truly is necessary equipment in order to have a competitive Computer Science program.

**Physics** – Franck-Hertz system and Universal Interface – This equipment will be used to support modern physics labs. The Physics program is adding labs and these units provide important resources for instruction and study that have not previously been available to students.

**ESRM** – SCUBA compressor, hose and tanks - ESRM students and courses are increasingly involved in inter- and subtidal work. Our increasing focus in these areas is supported by both program-based curricula and undergraduate research and by system-wide collaborations (CSU COAST-funded projects, external grants, and membership in the CSU Ocean Studies Institute which provides CSUCI with a Diving Safety Officer). This equipment will facilitate both SCUBA activities as well as pneumatic drilling to deploy/anchor a wide array of electronics and survey markers across a variety of land- and seascapes (especially rocky hill slopes above campus, cliffs on Santa Rosa Island, intertidal, and subtidal regions). Lastly this equipment will support our growing Remotely Piloted Systems operations in/around marine settings, wherein we often have need for subtidal support of ROVs and water-landing UAVs. We are specifically requesting portable units so that all of this equipment could be temporarily located to Santa Rosa Island for longer (multiple weeks) classes or activities.

2. Project/Activity Budget. Please enclose a complete detailed budget of the entire project. Indicate (in bold) specific items of requested MSFT funding including (where applicable) a schedule and priority of project items to be considered if the project is funded at a reduced level. Were other, less costly, approaches considered when preparing the budget for the project? Are there elements that could be eliminated or deferred if funding is not available for the entire project?

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<u>Description</u>	Quantity	<u>Unit Cost</u>	<u>Subtotal</u>	Tax & Shipping	<u>Total</u>	
NETWORKING LAB						
HP BLc7000 Special/Promotional Enclosure	1	26,154	26,154	2,615	28,769	
HP ProLiant BL685c Server Blades	2	9,819	19,638	1,964	21,602	
Cisco CCENT CCNA CCNP CCIE Lab 1x WS-C2950T-24 Switch and a ISR 1841 Router(15.1 IOS Image) WIC-						
1DSU-T1 V2, Connection Bundle and Rack Mounts	8	190	1,520	152	1,672	
VMWare Dept. License HP P2000 G3 MSA FC Dual Controller SFF Modular	1	250	250	25	275	
Smart Array-AP846B	1	9,890	9,890	989	10,879	
PHYSICS LAB					63,197	
850 Universal Interface	12	999	11,988	1,199	13,187	
Frank-Hertz System (Hg) TEL84825HGSYS	8	2,813	22,504	2,250	24,754	
					37,941	
SCUBA SUPPORT						
SCUBA Compressor	1	4,123	4,123	412	4,535	
SCUBA hose & supplies	1	500	500	50	550	
SCUBA Tanks	4	199	796	80	876	
					5,961	
					107,099	

Reduced Configuration Description	Quantity	Unit Cost	Subtotal	Tax & Shipping	Total
NETWORKING LAB	Quantity	OTHE COSE	Subtotal	Tax & Shipping	TULAI
HP BLc7000 Special/Promotional Enclosure	1	26,154	26,154	2,615	20 760
HP ProLiant BL685c Server Blades	2	9,819	•	•	28,769
THE FTOLISHE BLOODE Server blades	2	3,013	19,638	1,964	21,602
Cisco CCENT CCNA CCNP CCIE Lab 1x WS-					
C2950T-24 Switch and a ISR 1841					
Router(15.1 IOS Image) WIC-1DSU-T1 V2,					
Connection Bundle and Rack Mounts	4	190	760	76	836
VMWare Dept. License	1	250	250	25	275
HP P2000 G3 MSA FC Dual Controller SFF Mc	1	9,890	9,890	989	10,879
					62,361
PHYSICS LAB					,
350 Universal Interface	6	999	5,994	599	6,593
Frank-Hertz System (Hg) TEL84825HGSYS					
Talik-Heliz System (ng) TEL04023HG313	4	2,813	11,252	1,125	12,377
					18,971
SCUBA SUPPORT					
SCUBA Compressor	1	4,123	4,123	412	4,535
SCUBA hose & supplies	1	500	500	50	550
SCUBA Tanks	4	199	796	80	876
					5,961

87,293

<sup>3.</sup> **Project Assessment**. Describe how the effectiveness of the project will be assessed and measures that will be used to determine if it has attained its objectives. Please note a report will be due at the end of the semester (or fiscal year for annual projects). If funded, how will the project acknowledge the use of student funds so that students are aware that their student fees made (or helped to make) it possible? If appropriate, indicate how the project or activity promotes sustainability at CI.

The programs that will occupy Sierra Hall are attempting to build up a base of equipment that will be used for years to come to support student learning and discovery. This project will promote both student study and research. Success of the project will be assessed based on use of the equipment once it is installed. .

4. Sources of Project Support. Please list the other sources of funding, and additional support for the activity. If this project or activity has been conducted previously please indicate how it was funded. Please explain if MSFT is the only source of support for the project.

The construction budget provides the primary funding for equipment in Sierra Hall. The total project is approximately \$42 million. Of this about \$750,000 is set aside for classroom and lab computers and equipment, another \$750,000 is allocated for furniture and network infrastructure. The actual equipment needs, as provided by the academic programs, amount to approximately \$1.8 million (slightly over \$1 million in unfunded equipment needs). The request is that the MSFT committee assist by supporting the purchase of about 10% of the unfunded equipment needs. University Advancement is also being asked to assist in identifying donors to support the purchase of additional equipment (not included in this proposal) that was not funded for the Sierra Hall project.

**Fiscal Management:** Project sponsor's unit or department may be responsible for incurred over and above what is funded through the MSFT. If support is requested for costs beyond initial award, or for use on activities or materials not included in approved proposals, the project sponsor must seek approval from the MSFT committee. The project sponsor will be responsible for managing purchases and transfers of funds related to approved projects.

Please review MSFT web page for information about the fund and its objectives before submitting your application.