





DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

ICT Building, Visayas State University Visca, Baybay City, Leyte, PHILIPPINES Telefax: 053 565 0600 local 1022 Email: dcst@vsu.edu.ph

Website: www.vsu.edu.ph

November 10, 2022

Louella C. Ampac Financial Management Director Visavas State University Visca, City of Baybay, Leyte

Thru:

Beatriz S. Belonias VP for Academic Affairs

Good day.

I would like to thank your good office for the Php 581,740.00 budget that you've allocated to our department for FY 2023 (Lab share and sub-allotment). However, the said budget is insufficient to replace our aging laboratory computers especially now that most application program interface (API), machine learning and artificial intelligence (AI) tools, parallel processing platforms, web frameworks, software development kit (SDK) and scientific computing tools are computationally and memory intensive.

Based on the recent inventory of our laboratory technician together with our faculty who specialized on computer hardware, one (1) laboratory i.e. Room 203 is practically useless since the twenty-four (24) computers present are powered obsolete by Intel® Atom™ purchased circa 2012. Furthermore, although the forty-eight (48) computers on laboratory Rooms 202 and 103 are Intel ® Core ™ i3 and i5 series with 4 GB or RAM, these are several generations behind from the current 13th generation Core i-series. These computers are more than 6 years old already. If it were not for the solid state drive that was installed as upgrade to these machines, the utility of those machines would seriously be hampered. Finally, we need to upgrade the local wireless connectivity on the laboratories because most students who would bring laptops to class would unplug the ethernet cables that are already fixed on desktop computer(s).

In line with this, we would like to request for additional budget based on the itemized list of priority equipment enumerated in Table 1.



Vision:

A globally competitive university for science, technology, and environmental

conservation.

Development of a highly competitive human resource, cutting-edge scientific knowledge and innovative technologies for sustainable communities and environment. No. CET.DCST C22-144

Page 1 of 5 FM-VSU-03 v0 05-04-2020

Table 1. Itemized details of the equipment for purchase

Desktop Computer, Assembled, 12th Gen Core 13, 3GB RAM with Monitor and 800W Bronze PSU, No OS Processor: Intel 13- 12100 4C/BT 3.30 GHz up to 4.30 GHz, with Intel® UHD Graphics 730 or higher Motherboard: Intel H610 Chipset for 12th Gen Intel® Core ™ Series Processors, Dual Channel Non- ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GBE LAN, NVMe PCIe 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher RAM: 8GB DDR4 3200MHz or higher SSD: 250 GB SATA III, read speeds up to 550 MB/s or higher Generic mATX casing 600W 80 plus Bronze Certified PSU Monitor Size: 21.5" Panel Type: VA Resolution: 1920x1080 (FHD) Refresh Rate: 75Hz Response Time: 5MS Interface: VGA, HDMI With a slim and 3-sided frameless design Flicker Free and Low Blue	Item and Specification (Based on SPPMIS)	Quantity	Unit Price (Based on SPPMIS)	Total Price	Purpose
Mode eye	Assembled, 12th Gen Core i3, 8GB RAM with Monitor and 600W Bronze PSU, No OS Processor: Intel i3-12100 4C/8T 3.30 GHz up to 4.30 GHz, with Intel® UHD Graphics 730 or higher Motherboard: Intel H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCIe 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher RAM: 8GB DDR4 3200MHz or higher RAM: 8GB DDR4 3200MHz or higher SSD: 250 GB SATA III, read speeds up to 550 MB/s or higher Generic mATX casing 600W 80 plus Bronze Certified PSU Monitor Size: 21.5" Panel Type: VA Resolution: 1920x1080 (FHD) Refresh Rate: 75Hz Response Time: 5MS Interface: VGA, HDMI With a slim and 3-sided frameless design Flicker Free and Low Blue			648,000	



Vision: Mission:

A globally competitive university for science, technology, and environmental Page 2 of 5 conservation.

Development of a highly competitive human resource, cutting-edge scientific vo 05-04-2020 knowledge and innovative technologies for sustainable communities and environment.

No. CET.DCST C22-144

Page 2 of 5 FM-VSU-03 v0 05-04-2020

protection technology				
Graphics Processor, RTX 3050 Core code and process: GA106/8nm Unified shader: 2560 Core frequency: 1552/1777MHz Memory capacity and specifications: 8G/128bit/GDDR6 Bus Interface: PCI-Express 4.0 x8 Output interface: HDMI 2.1*1 + DP 1.4a*3	20	19,000	380,000	Computing accelerators for laboratory room 203
Ethernet Switch, 48-Port Gigabit Rackmount • 48 10/100/1000Mbps RJ45 ports • Innovative energy- efficient technology saves power consumption • Supports MAC address self-learning and auto MDI/MDIX • Standard 19-inch rack-mountable steel case • Standards and Protocols IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x • Interface 48 10/100/1000Mbps RJ45 Ports (Auto Negotiation/Auto MDI/MDIX) • Network Media 10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) • 100BASE- TX/1000BASE-T: UTP category 5, 5e o above cable (maximum 100m) • Physical Security Lock No • Switching Capacity 96Gbps • Packet Forwarding Rate 71.4Mpps		16,000	48,000	Network switches for laboratory Room



Vision:

Mission:

A globally competitive university for science, technology, and environmental conservation.

Development of a highly competitive human resource, cutting-edge scientific vo 05-04-2020 knowledge and innovative technologies for sustainable communities and environment.

Page 3 of 5
FM-VSU-03
Vo 05-04-2020

No. CET.DCST C22-144

 MAC Address Table 16K Buffer Memory 12Mb Jumbo Frame 12KB Transfer Method Store-and-Forward Certification FCC, CE, RoHS 				
Wifi 5 Mesh Router Wi-Fi 5: IEEE 802.11ac/n/a 5 GHz, IEEE 802.11n/b/g 2.4 GHz AC1300: 5 GHz: 867 Mbps (802.11ac), 2.4 GHz: 400 Mbps (802.11n) Mesh Technology A× Antennas (Internal) Beamforming Qualcomm 717 MHz Quad-core CPU Supports WAN/LAN auto-sensing WPA-Personal WPA2-Personal Certification: CE, FCC, IC, NCC, BSMI, IDA, RCM, JPA, JRF, VCCI, KC, RoHS	7	5,000	35,000	Local wireless connectivity for Room 101, 102, 103, 201a, 201b, 202, 203
Network Attached Storage, 8 Bay, AMD Ryzen V1500B CPU CPU Model AMD Ryzen V1500B CPU Frequency 4- core 2.2 GHz System Memory 4 GB DDR4 ECC SODIMM Maximum Memory Capacity 32 GB (16 GB x 2) Drive Bays 8 Hot Swappable Drive: yes RJ-45 1GbE LAN Port 4 (with Link Aggregation / Failover support) File system: Btrfs, EXT4 Certification: FCC, CE, BSMI, EAC, CCC, KC, VCCI, RCM	1	70,000	70,000	Storage cluster for Laboratory



Vision:

Mission:

A globally competitive university for science, technology, and environmental

Conservation.

Development of a highly competitive human resource, cutting-edge scientific

knowledge and innovative technologies for sustainable communities and environment.

Page 4 of 5

FM-VSU-03

vo 05-04-2020

No. CET.DCST C22-144

Aircon, Window Type, 2HP, Non-inverter Cooling Capacity: 2.0 HP or 19,100 kJ/h Power Input: W 1,680 EER: kJ/hW: 11.4 Noise Level Indoor (Low): dB A 48 Power Source V/Phase Hz 230 V, 1Ø Phase - 60 Hz Refrigerant R32 Non-inverter, Two (2) Fan Speed Automatic Condensate removal 4-way air deflection system Slide out chassis Removable, washable intake grille Easy to clean air filter	2	40,000	80,000	Replacement of unserviceable Aircon unit or laboratory rooms
Cable Duct, Slotted PVC, 40mm x 40mm	16	600	9,600	Cable management for Laboratory rooms
Cable Duct, Slotted PVC, 60mm x 60mm	5	750	3750	Cable management for Laboratory rooms
Cable Duct, Slotted PVC, 25x40mm	15	450	6,750	Cable management for Laboratory rooms
LED Tube with housing (T8), 18 watts, 4ft (Daylight)	50	500	25,000	Replacement of busted lights on laboratory rooms
Tox, 1" box of 50	130	5	650	Cable management for Laboratory rooms
Tapping Screw Black 1" box of 50	50	5	250	Cable management for Laboratory rooms
Total			1,307,000	

Hoping for your favorable response regarding this matter.

Respectfully yours,

MAGDALENE C. UNAJAN Head, DCST

Noted by:

JANNET C. BENCURE Dean, CET

Recommends' Approval (I. priority acquisitum)

BEATRIZ S- BELONEAS

VPAN

Schom-augue

Funds available: changed to

\$ 5815740 fun 2003 excess to STF CO-PY 2021 ICT if more from 50k



Vision:

A globally competitive university for science, technology, and environmental conservation.

Mission:

Development of a highly competitive human resource, cutting-edge scientific knowledge and innovative technologies for sustainable communities and environment. No. CET.DCST C22-144

FM-VSU-03 v0 05-04-2020