Republic of the Philippines
VISAYAS STATE UNIVERSITY
Visca, Baybay City, Leyte

PURCHASE REQUEST

PR No.: **TF-2022-01-00081**   Date: **01-27-2022**

Dept./Office: **ICTMC**

Section/End-User: **Norman O. Villas**

Funding Source: **Trust Fund**

Category: **IT Supplies and Equipment**

Project Title/Code: **Smart Campus Phase 1**

Item #	Item Description	Unit	Qty	Unit Cost	PAR/ICS	Total Cost
1	1 Lot Containerized Data Center	lot	1	5,000,000.00		5,000,000.00

Specification:

Description	Qty
UPS	
15kvA/15kW Rack-mountable Online UPS, 230V	1
Rack-mount kit	1
24 x 7 Power Up Service	1
External Battery Pack, Rack-mounted, 192V with rail kit	1
Start-up service, 24x7	1
Data Cabinet and Accessories	
42U Server Rack Enclosure 600mm x 1070mm w/ Sides, Black Color	2
42U 750mm Wide x 1070mm Deep Enclosure with Sides, Black Color	1
Vertical Cable Manager for 750mm Wide 42U (2 units)	2
Hinged Covers 750mm Wide 42U Vertical Cable Manager (2 units)	2
Vertical Cable Manager for 600mm Wide 42U (2 units)	2
1U 19-inch Black Modular Toolless Blanking Panel (10 units)	5
Basic Rack PDU, Zero U, 16A, 230V, (20)C13 & (4)C19, IEC C20	3
Power Cord, C19 to C20, 2.0m	3
Assembly service	1
PACU	
In-row PACU 300mm up to 30kW with humidifier (230V/1ph/60hz)	1
30kW Condensing Unit, (400V/3ph/60Hz), Single feed	1
Ball Valve & Union	1
Start-up and assembly service, 24x7	1
Semi-annual PM, 24x7	1

	Risk contingency			1		

Container
Van

	20 Footer Container Van w/			1		

Steel door with hinges and stainless steel door knob

Insulation

Cable entry/feed through provision

Electrical outlet provisions and lighting

Hauling and positioning

Engineering Services

Design, installation, configuration and project management   1

#	Description	Unit	Qty	Unit Cost		Total
2	**Interactive Smart Classroom Setup for Mixed Virtual and Face-to-Face Instruction - Audio Component -**	lot	1	130,000.00		130,000.00

Specification:

LOT 1 -
AUDIO

Audio mixer	4 mic XLR/line 1/4 inch jack inputs, 2 with Class A FET high impedance inputs 3 band EQ 1 pre-fade Aux send 1 FX send Sound image pan Stereo returns & playback All inputs with level control Responsive 3-band, swept mid EQ with MusiQ 2 stereo sources with MP3 player compatibility Separate 2-track record outputs Stereo playback input for 2-track replay XLR main stereo outputs with inserts Configurable USB stereo audio in/out Stereo monitor outs 48V microphone phantom power	1	pc

Lavalier Microphone and Receiver	2.4GHz ISM Band Operation 1 x Body Pack Transmitter 1 x Headset Mic 1 x Lavalier Mic 1 x Half-Rack Receiver Built-In 5-Band Graphic EQ 24-Bit Linear PCM Digital Audio Intelligent Feedback Reducer Includes Body Pack Belt Clip & Tie Clip Includes 2 Windscreens & 2 Antennas				1	set
2-pc Wireless Microphone Set	2 x PG58 Cardioid Microphone with Transmitters Dual-Channel Tabletop Receiver				1	set
3-prong cables	1 meter male-to-male XLR connector				5	pcs
USB Cable	2 meters Male Type A to Male Type B USB Connector				2	pcs
Active Speakers	600 Watts Loud Speaker with Stand 12-inch (305 mm) LF driver, 2-inch (50.8 mm) voice coil 1-inch (25.4 mm) neodymium HF compression driver Standard speaker pole socket Balanced XLR/TRS with selectable Mic/Line input. XLR Link Output, Contour EQ switch and Ground-Lift switch				2	sets
Microphone Stand	Tripod Floor Stand With Telescopic Boom Arm 2 Microphone Holder Adoptors				2	pcs

3	Interactive Smart Classroom Setup for Mixed Virtual and Face-to-Face Instruction - Video Component	lot	1	940,571.43		940,571.43

Specification:

LOT 2 -
VIDEO

PTZ Camera - With Auto-Tracking Software	1/2,3-Type MOS 30 x optical zoom (10x digital zoom + Digital Extender) PoE+ Support Audio input function Night Mode*1 - Supports automatic switching High Dynamic Range (HDR) mode Video Output: HDMI HDMI Video Output Format: 1080/50p, 1080/59,94p, 1080/50i,1080/59.94i, 1080/25ü, 1080/29.97p, 1080/25psF, 1080/29.97psF,720/50p, 720/59.94p Freeze During Preset Function IP connection allows control of up to 100 AW-HE40H/S units by using AW-RP50E IP Image output function allows Image monitoring by IP connection with a PC RS422, RS232C In/Out	1	set
PTZ Camera	With Compatible Auto-Tracking Software 1/2,3-Type MOS 30 x optical zoom (10x digital zoom + Digital Extender) PoE+ Support Audio input function Night Mode*1 - Supports automatic switching High Dynamic Range (HDR) mode Video Output: HDMI HDMI Video Output Format: 1080/50p, 1080/59,94p, 1080/50i, 1080/59.94i, 1080/25ü, 1080/29.97p, 1080/25psF, 1080/29.97psF, 720/50p, 720/59.94p Freeze During Preset Function IP connection allows control of up to 100 AW-HE40H/S units by using AW-RP50E IP Image output function allow	2	sets
PTZ Camera Controller	Compatible to PTZ Camera Large touch-panel LCD screen for monitoring and menu setting Joystick for one-handed operation Simplified PTZ camera presets and tracing memory Intuitive design elements based on direct feedback from everyday robotic camera operators 3G-SDI Active Through Output, 5 x RS-422, LAN PoE+, 2 x GPIOs	1	pc
Video Mixer	8-Channel HDMI Live Streaming Switcher Supports up to 1080p60 RTMP Streaming via Ethernet or USB-C Record Program Out and Individual Inputs 11-Input, 2-Channel Audio Mixer Input Frame Rate and Format Converter Re-Sync on All HDMI Inputs HD Multiview Output with up to 16 Views Local and Software Switching 4 x Upstream, 2 x Downstream Keyers	1	pc

Item	Description	Details						Qty	Unit

	CAT6 Cables for PTZ	CAT 6 UTP CAT 6 Cable, 4 Pair, 24 AWG, Solid Bare Copper Conductor, U/UTP, PO Insulation, PVC Jacket, Indoor PVC - Polyvinyl Chloride ISO/IEC 11801 TIA 568.2-D Category 6 NEMA WC-63.1 Category 6, UL verified to Category 6 Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6	1	spool
	Backup HD Cameras	1080p Video at 60 fps 1/5.8" BSI MOS Sensor 50x Optical Zoom & 90x Intelligent Zoom 5-Axis HYBRID O.I.S.+ and Level Shot 2.7" Touchscreen LCD	3	sets
	HDMI Cables	3 meters	6	pcs
	HDMI-over-IP Extenders	120m Over Cat5/5e/6 IP/TCP Support 1080P	6	sets
	Tripods	Slim-Profile Tripod Folded Width: 3.2", Folded Length: 20.1" Load Capacity: 8.8 lb Max Height: 57.6", Min Height: 15.7" Leg Sections: 4, Weight: 2.2 lb Reversible, Rapid Column Carbon-Fiber Legs, Rubber Feet 1/2-Turn Twist Locks, Bubble Level Magnesium-Alloy Ball Head, 90° Tilt 360° Pan, Arca-Type Compatible Clamp	6	pcs
	Installation, Testing, & Commissioning			

4	Interactive Smart Classroom Setup for Mixed Virtual and Face-to-Face Instruction Class room and Stud	lot	1	615,000.00		615,000.00

Specification:

	LED Soft panel lights	Measures: 8.5 x 10 x 2.5" Beam Angle: 120° Color Temperature: 3200-5600K, CRI: 95 110 to 240 VAC Adapter, Battery Option 0-100% Dimming, Flicker-Free Includes 4-Leaf Barndoor, Soft Diffuser	8	sets

LED Fresnel Spot lights	Up to 50W / 3500K LED Source Barndoors and Gel Frame Included Power-Link up to 26 Units at 230V Power Cord Included					8	sets
Lighting brackets, clamps, and accessories	To install LED soft panel lights, Fresnel spot lights, and Green Screen in venue as designed by the end-user					1	set
Green Screen Setup	Covers half of a 10m W x 10m L x 4 m H diamond room including the floor Can be retractable for non-green screen uses With mounts attached to the room ceiling and walls					1	set
Rolling TV cart with wheels	Heavy duty for 40" televisions					2	pcs
Smart OLED/QLED TV 75 to 90"	Flat screen measuring from 75 to 90" diagonally Up to 4K Ultra HD resolution Native aspect ratio: 16:9 With Airplay 2 Internet over WiFi or LAN With Smart functionalities Ports: Ethernet/LAN, USB, HDMI					1	pcs
40" Television	Smart HD TV measuring 40" diagonally Native aspect ratio: 16:9 With Airplay 2 Internet over WiFi or LAN With Smart functionalities Ports: Ethernet/LAN, USB, HDMI					2	sets
HDMI Cables	3 meters					2	pcs
Installation, Testing, & Commissioning							

5	**Interactive Smart Classroom Setup for Mixed Virtual and Face-to-Face Instruction Computer Components**	lot	1	550,000.00			550,000.00

Specification:

LOT 3 -
COMPUTER
S

Class Laptop Computer	Integrated 8-core CPU, 8-core GPU, and 16-core Neural Engine 16GB unified memory 512GB SSD storage 13.3-inch (diagonal) LED-backlit display with IPS technology; 2560-by-1600 native resolution at 227 pixels per inch with support for millions of colors Backlit Keyboard - US English Two Thunderbolt / USB 4 ports	1	pc

Production Laptop Computer	Integrated 10-core CPU, 32-core GPU, and 16-core Neural Engine 64GB unified memory 1TB SSD storage 16.2-inch (diagonal) XDR display; 3456-by-2234 native resolution at 254 pixels per inch Three Thunderbolt 4 ports, HDMI port, SDXC card slot 140W USB-C Power Adapter Backlit Keyboard	1	pc
Technical Desktop Computer	AMD Ryzen 7 high end processor 8 Core Processor upto 3.7Ghz clock speed 16GB DDR4 3200MHz RGB RAM B450 feature-rich motherboard Dedicated NVIDIA graphics card, VR-ready 500GB high speed NVMe SSD storage 1TB HDD 7200rpm 750W 80+ gold rated power supply Windowed case, tempered glass side panel Genuine Windows 10 Pro. With Pre installed Declink 4k SDI Capture Card used for livestream and video capture 28" 4K UHD Monitor Optical Mouse USB keyboard with backlight	1	set

Tablet Set	Multi-Touch Tablet 12.9-inch (diagonal) mini-LED-backlit Multi-Touch display with IPS technology 2732-by-2048-pixel resolution at 264 pixels per inch (ppi) Integrated Chip with 8-core CPU with 4 performance cores and 4 efficiency cores, 8-core GPU and 16-core Neural Engine 512 GB storage WiFi model USB-C Charge Cable (1 meter) 20W USB-C Power Adapter Pro camera system: Wide and Ultra Wide cameras Wide: 12MP, f/1.8 aperture Ultra Wide: 10MP, f/2.4 aperture, and 125° field of view 2x optical zoom out Digital zoom up to 5x Compatible Stylus through Bluetooth Connection Length: 6.53 inches (166 mm) Diameter: 0.35 inch (8.9 mm) Weight: 0.73 ounce (20.7 grams) Compatible Keyboard Backlit keys with scissor mechanism Designed for Multi-Touch gestures and the cursor USB-C port for charging tablet Foldable into case	1 set

	HDMI Capture Card	Input interface: HDMI input with loop out HDMI input format: comply with HDMI3.1 standard. Host interface: USB2.0, *40MB/s transmission bandwidth Input interface: 1 HDMI interface HDMI video input: HDMI video input 1 channel 1080P/60Hz HDMI HD HDMI input format: Comply with HDMI 1.4a standard, support 1080p/60Hz8-bit, (RGB, YUV) HDMI output interface: 1 HDMI output port, 1920x1080 frame?4K-30FPS USB output format: 640x480-1920x1080. Frame rate: 60 fps Audio input interface: LINE IN3.5MM audio input Video sampling rate: HDMI: 165MHz Audio and video capture: Comply with UVC (USB video class), UAC (USB audio class) specifications Support resolution: 4096*2160p and 1920*1080p standard resolution Operating system support: supports x86 and x64 versions of the following operating Onboard memory: 64MB DDR2, working frequency is 300 MHz, bit width is 16bit Color:Black Size:6*6*1.3cm Compatible development interface: "DirectShow (Windows), DirectSound (Windows), V4L2 (Linux), ALSA (Linux)" Onboard memory: 64MB DDR2, working frequency is 300 MHz, bit width is 16bit Upgrade: the firmware can be upgraded Power consumption: <= 3.5W		2	pcs
	HDMI Splitter	DC 5V power supply HDMI Input to 4 HDMI outputs		2	pcs
	UPS	Output Power Capacity: 325 Watts/650VA Output Frequency: 50/60 Hz +/-1 Hz Output Connections: (2) Universal Receptacle Nominal Input Voltage: 230V Input Connections: NEMA 5-15P Maximum Input Current: 5A Battery Type: Maintenance-free sealed Lead-Acid battery with suspended electrolyte leakproof Recharging Time		1	pc
6	QR Code scanner Android OS	unit	40	18,000.00		720,000.00

Specification:

- OS: Android
- CPU Speed: 2 GHz
- CPU Type: Octa-Core
- Display: Resolution (Main Display): 2000 x 1200 (WUXGA+)
- Color Depth (Main Display): 16M

- Technology (Main Display): TFT
- Form Factor: Tablet
- Camera: Rear Camera - Resolution: 8.0 MP
- Front Camera - Resolution 5.0 MP
- Rear Camera - Auto Focus: Yes
- Video Recording Resolution:FHD (1920 x 1080) @ 30fps,
- Memory: RAM: 3GB
- External Memory Support: MicroSD (Up to 1TB)
- ROM Size: 64GB
- Sensors: Accelerometer, Gyro, Sensor, Geomagnetic Sensor, Hall Sensor, Light Sensor
- Battery Capacity: mAh, Typical 7040
- Network/Bearer: GSMGSM850, GSM900, DCS1800, PCS1900, 3G UMTSB1 (2100), B2 (1900), B4 (AWS), B5 (850), B8 (900), 4G FDD LTEB1 (2100), B2, (1900), B3 (1800), B4 (AWS), B5, (850), B7 (2600), B8 (900), B12,(700), B17 (700), B20 (800), B28, (700), B66 (AWS-3),4G TDD LTEB38 (2600), B40,(2300),
- Connectivity: Location Technology GPS, Glonass, Beidou, Galileo USB Version USB 2.0
- Earjack3.5mm
- Stereo
- 1Wi-Fi802.11 a / b / g / n / ac
- 2.4G+5GHz, VHT80
- Bluetooth Version Bluetooth v5.0
- Bluetooth ProfilesA2DP, AVRCP,
- DI, HFP, HID, HOGP, HSP, MAP,OPP, PAN, PBAP
- PC Sync. Smart Switch (PC version)
- Audio and Video: Video Playing
- FormatMP4, M4V, 3GP, 3G2, WMV, ASF, AVI, FLV, MKV,WEBM
- Audio Playing FormatMP3, M4A,3GA, AAC, OGG, OGA, WAV,WMA, AMR, AWB, FLAC, MID,MIDI, XMF, MXMF, IMY, RTTTL,RTX, OTA
- Video Playing Resolution FHD(1920 x 1080) @ 60fps

		TOTAL						7,955,571.43

Purpose: For QR Code scanners for students and staff

Checked by:		Funds Available:	
MICHAEL ANTHONY JAY B. REGIS		**NICK FREDDY R. BELLO**	
TWG - IT Supplies and Equipment		HEAD, ACCOUNTING OFFICE	

	Requested by:	Noted by:	Approved by:
Signature:			
Printed Name:	**NORMAN O. VILLAS**	**SEAN O. VILLAGONZALO**	**EDGARDO E. TULIN**
Designation:	END USER	UNIT HEAD, PROJECT LEADER	PRESIDENT, VSU