



University of Science and Technology of Southern Philippines

Alubijid | Cagayan de Oro | Claveria | Jasaan | Oroquieta | Panaon

BID FORM

NAME OF THE PROJECT : **Proposed Procurement for the Supply, Delivery, Installation and Commissioning of 3D Printer for USTP-CDO**

APPROVED BUDGET OF : **TWO MILLION SEVEN HUNDRED NINETY ONE THOUSAND PESOS AND 00/100 (P2,791,000.00) ONLY**

BRIEF DESCRIPTION : **Supply, Delivery, Installation and Commissioning of 3D Printer for USTP-CDO**

SOURCE OF FUND : **INCOME CY 2020**

CONTRACT DURATION : **One Hundred Twenty (120) Calendar Days**

ITEM NO.	DESCRIPTION/SPECIFICATIONS	QTY	UNIT	USTP APPROVED UNIT PRICE	UNIT PRICE	AMOUNT
1	<p>Open-Source Large Format Desktop 3D Printer with Independent Dual Extrusion System</p> <p>Technical Specifications :</p> <ul style="list-style-type: none"> Independent Dual Extrusion - a technology that allows for two parts to be printed at the same time • High-Temperature Printing - allows the machine to print a wide-range of industrial materials • Open Source Filament - allows the user to print any type of filament • Accurate Filament Control - makes the 3D Printer suitable to print flexible materials • Large Build Volume, Instant Bed Replacement, and High-Grade Glass Print Beds • Fully-Enclosed High-Grade Aluminum Frame - stands for safety and durability • Metal Carriage - all functional parts are metal instead of plastic • 7" touchscreen • Remote Connectivity and Built-in Webcam - grants the user the access and control of the printer anywhere, anytime • Build Volume: Single Extruder: 330x320x205 mm; Dual Extruder:300x320x205 mm • Nozzle Diameters: 0.35, 0.4, 0.5, 0.8 in mm • Nozzle Temperature: 270/360 degree Celsius • Print Bed Temperature: 90 degree Celsius • Extruders: Two (2) Independent Extruders • Printing Speed: 100 (mm/s) • Max. Flow Rate: 6 (mm³/s) • Travel Speed: 250 (mm/s) • Layer Height: 50-350 microns • Positioning Precision: DW/H 8/10 microns • Body Framework: Aluminium • Dimensions: 723 x 831 x 801 mm • Nozzle Swapping - Nozzles can be swapped within seconds and without tools <p>Open-Source Industrial FDM 3D Printer with Belt-Driven Z Axis and Modular Heated Borocilate Glass</p> <p>Specifications: Print Technology Fused Filament Fabrication Print Volume Dimensions 280 mm x 280 mm x 285 mm</p>	1	unit	795,000.00		

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2	<p>Print Volume 22,344 cm³ (1,362.56 in³) Ambient Operating Temperature From 5°C to 45°C (41°F to 113°F) Operating Footprint 83.2 cm x 71 cm x 52 cm (32.76 in x 28 in x 20.47 in) Maximum Travel Speed 200 mm/sec Leveling Automatic Compensation Calibration Automatic X/Y/Z offset calibration Connectivity USB Serial or USB Flash Drive with Included 4gb Flash Drive Included Tool Head Dual Extruder Extruder/Hot End 2x E3D Titan Aero Nozzle Diameter 0.50 mm Nozzle Material Hardened Steel Nozzle Temperature Up to 290°C (554°F) Nozzle Heatup Time From 18°C to 230°C (64°F to 446°F) in 1 minute, 36 sec Print Surface Modular Heated Borosilicate Glass/PEI Maximum Print Bed Temperature Up to 120°C (248°F) Print Bed Heat Up Time From 18°C to 100°C (64°F to 212°F) in 10 minutes, 45 seconds Layer Resolution 0.05mm-0.4mm (0.002"-0.015") Minimum Positive Feature Size 0.5 mm (0.02 in) Calculated XYZ positional resolution 10, 10, <1 micron Filament Diameter 2.85 mm Supported Materials Open filament system compatible with PLA, ABS, Nylon, Polycarbonate, Carbon Fiber Reinforced Blends, TPU 85A & 95A (Flexible), PETG, PETT, Copolyester, PVB (Polycast), PVA, HIPS, and many more 3rd party filaments.</p>	2	unit	495,000.00		
	<p>Comprehensive Tool Kit Includes: Hangable bag, replacement wiper pads, part removal tool, scrub pads, glue stick, precision knife, long nose pliers, 7 piece hex key set, metric ruler, dental pick, and tweezers. Comprehensive Documentation Includes: USB flash drive with source files, Quick Start Guide, Quality Assurance Record, and more. First 3D Print Material A small length of PLA filament is included to be used in your first 3D print, Operating System Compatibility GNU/Linux, Mac, Windows Recommended Software Cura Version 3.2 or newer Firmware Marlin Supported File Types .stl, .obj, .x3d, .3mf, .png, .jpg Power Requirements 100VAC-240VAC, 50Hz-60Hz, 3.2A max Output 24VDC, 500 watts, 21 amps Power Supply PMC-24V150W1AA Power Cable IEC cord, C13 to region-specific connector</p>					
3	<p>Open-Source Large Format Desktop 3D Printer with Independent Dual Extrusion System Technical Specifications : Architecture IDEX (Independent Dual EXtruder system) Technology FFF (Fused Filament Fabrication) Build Volume 420 mm x 297mm x 210mm Number of extruders 2 independent extruders Nozzle diameter The 3d Printer has mounted two 0.4mm hotends Compatibility with these hot ends 0.3 / 0.4 / 0.5 / 0.6 / 0.8 / 1mm Heated Bed PCB Screen Full Color Capacitive Touchscreen Connectivity SD Card (autonomous)USB Electronics BCN3D Electronics v1.0Independent Stepper Drivers Firmware BCN3D Sigma - Marlin Supported files gcode Operating Sound 50 dBA Certifications CE FCC Filament diameter 2.85 ± 0.05 mm Extruder system</p>	1	units	345,000.00		



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	<p>Extruder: Bondtech high-tech dual drive gears Hotends: Optimized A setting that prints two identical models and manufactured by e3D Printing Models Duplication Mode, Mirror Mode, Soluble Supports Mode, Multimaterial Mode Layer height 0,05 - 0,5mm (depending on the nozzle diameter) Positioning resolution (X/Y/Z) 12,5 µm / 12,5 µm / 1 µm Operating temperature 15°C - 35°C Extruder maximum temperature 290°C Extruder maximum printing temperature 280°C Heated bed maximum temperature 100°C Filament diameter 2,85 ± 0,05 mm Compatible Materials PLA, NYLON, PET-G, ABS, TPU, PVA, Composites, and More Open Filament System Yes File preparation software Cura Operative Systems Windows, Mac, Linux Supported files STL, OBJ, AMF Input AC 84-240V, AC 3,6-1,3A, 50-60Hz Output 24V DC, 13A</p>					
4	<p>Peripherals and Services Accessories Included:</p> <ul style="list-style-type: none"> • 1x 3D Printer Kit w/ storage box • 2 Spools ABS Filament • 2 Spools PVA Filament • 2 Spools PLA Filament • 1x 12" Caliper • 1x Digital Micrometer • 1 set Desktop Computer, Intel Core i5 7400 / 8G DDR4 / 1TB HDD / GEFORCE, GTX1050 2G, DDR5/ 24" FHD / DVDRW / Windows 10 / GLAN / WIFI / Bluetooth / Keyboard / Mouse/ 23" Monitor / with 1 chair <p>Training and Installation: At least 3 day(s) onsite training. Training will be provided by a certified trainer. Training certificate from the manufacturer should be attached. - Certification from the manufacturer as authorized distributor and has the capability to install, operate and after-sales service of the proposed machine.</p> <p>Management Training - At least one (1) day classroom training for 30 participants on Facilities Management. Includes marketing, human resource, operations, and finance training. A FabLab facilities management manual and a commitment to undertake training should be submitted by the supplier.</p> <ul style="list-style-type: none"> • Curriculum Integration Consultancy - At least one (1) day classroom consultancy for 30 personnel on Curriculum Integration. A commitment to • FabLab Launch Support - Supplier should support the FabLab Launch by displaying machine applications (outputs), sending one (1) workshop facilitator, and two (2) machine operators. A commitment to undertake FabLab Launch Support should be submitted by the supplier. • Machine Health Checkup - Supplier machine technician should visit the FabLab twice after the installation for machine health checkup. A commitment to undertake Machine Health Checkup should be submitted by the supplier. • Applications Re-training Workshop - Supplier should conduct an applications re-training workshop for 30 participants after the FabLab Launch. A commitment to undertake applications re-training workshop should be submitted by the supplier. 	1	lot	225,000.00		



ITEM NO.	DESCRIPTION/SPECIFICATIONS	QTY	UNIT	USTP APPROVED UNIT PRICE	UNIT PRICE	AMOUNT
5	High-End Laptop with bundled Design Software 1. (Intel Core i7-1065G7 Processor 1.30GHz 8M Cache, up to 3.90 GHz; 16GB 3733MHz LPDDR4x Memory Onboard; 512GB PCIe NVMe x4 Solid State Drive Onboard) 2. CAD-CAM: Solidworks to AUTODESK Fusion 360	2	unit	180,000.00		
6	Branded Laptop Intel Core i5 8250U Processor / 4GB DDR4 Memory / 256GB SATA3 SSD / 14" FHD 1920x1080 LED Display (Touch) / 802.11n WiFi + BT / HDMi Port / Webcam / Windows 10	1	unit	46,000.00		
7	Projector SVGA (800 x 600) native resolution / 3500 lumens of brightness / Long-life lamp of up to 7,000 hours for long-term savings / High 15000:1 contrast ratio and BrilliantColor technology / Wireless connectivity with optional wireless USB adapter / Display over HDMI or USB	1	unit	30,000.00		
TOTAL						

Total Bid Price in Figure: _____

Total Bid Price in Words: _____

Name and Signature of Bidder: _____

All bid proposals must be sealed in envelopes properly labeled and submitted to this University on or before the deadline of submission of bids, **JUNE 30, 2020, 03:00 P.M.** at the Procurement Services, 2nd Level Gymnasium Lobby, University of Science and Technology of Southern Philippines, C.M. Recto Ave., Lapasan Cagayan de Oro City.

The University of Science and Technology of Southern Philippines assumes no responsibility whatsoever to compensate or indemnify bidders for any expenses incurred in the preparation of the bid. The USTsP neither assumes any obligation for whatsoever losses that the bidders may incur in the preparation on their bids nor guarantee that an award will be made.


ENGR. ALEX L. MAUREAL
 BAC Chairperson