



**ABSTRACT OF QUOTATION**  
**SOLICITATION Number: RSU-2021-025**  
**Total ABC: PhP10,990,000.00**  
**Total QTY: 22**

**PROCUREMENT OF TECHNICAL AND SCIENTIFIC EQUIPMENT FOR THE FABLAB**

- LOT-1: FABLAB ENGINEERING EQUIPMENT (ABC: 980,000.00, QTY: 12)**  
**LOT-2: FABLAB MECHANICAL ENGINEERING 1 (ABC: 1,800,000.00, QTY: 1)**  
**LOT-3: FABLAB ELECTRICAL ENGINEERING (ABC: PhP3,000,000.00, QTY: 1)**  
**LOT-4: FABLAB AGRICULTURAL ENGINEERING (ABC: PhP2,500,000.00, QTY: 1)**  
**LOT-5: FABLAB CIVIL ENGINEERING (ABC: 1,960,000.00, QTY: 5)**  
**LOT-6: FABLAB MECHANICAL ENGINEERING 2 (ABC: PhP750,000.00, QTY: 2)**

**LOT-1: FABLAB ENGINEERING EQUIPMENT (ABC: 980,000.00, QTY: 12)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNT COST	ESTIMATED COST
unit	Plotter printer. DX 11. Double sided printing; 5760x1440dpi maximum print resolution color; mono or color; 1-100W; 31ppm print speed; 1-20 sheet output tray capacity; 1-50sheets input tray capacity (papers); large format printer function type; 220V input; USB support; warranty type local supplier warranty; warranty period 1 year.	1		
unit	Desktop computers. 23.8" core i5, 42000M all in one desktop PC AIO computer 8G DDR3 120G SSD, UPS battery. Windows 10 Home.	5		
unit	Laptops. Swift 5. 14". 1.0GHz Intel Core i5-1035G1 Quad-Core. 8GB LPDDR4 / 512GP Pcle SSD. 14" 1920 x 1080 Multi-touch display. Integrated Intel UHD Graphics. USB Type-A & Type-C / HDMI / Thunderbolt 3. WiFi 6 (802.11 ax?) / Bluetooth 5.0. Windows 10 Home (64-Bit). 0.6" thin, 2.18lbs. fingerprint reader, microphones, speakers combo audio jack. With licensed MS Office application.	5		
unit	DSLR Camera with standard and telephoto lens and tripod. D5600 + AF-P 18-55mm f3.5-5.6G VR. 24.2 megapixels. Optical zoom 3. display size 3.2. Additional lens AF Zoom-NIKKOR 70-300mm f4-5.6G. 1 year warranty.	1		
<b>TOTAL</b>		<b>QTY</b>	<b>12</b>	<b>ESTIMATED COST</b>

**LOT-2: FABLAB MECHANICAL ENGINEERING 1 (ABC: 1,800,000.00, QTY: 1)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNT COST	ESTIMATED COST
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unit	Single head marble CNC router carving machine, SS series 1325, heavy duty steel tube frame, gear transmission, T-slot table square rails, water tank, tool sensor, DSP controller, Fuling inverter, stepper motor and lead shine drivers, 6.0kW water-cooling spindle, including art cam software, limit switches for all xyz axes, 3pieces cooling sprayer, mist cooling system for free, aluminum, granite, marble, glass, wood, etc. 1300x2500x250mm XYZ working area; 1440x3040mm table size; ±0.03/300mm XYZ traveling positioning accuracy; ±0.05mm XYZ repositioning positioning accuracy; lathe structure steel structure; XY structure gear wheel transmission, shaft linear bearing; Z structure ball screw, shaft linear bearing; 11kW max power consumption; 0-32000mm per minute maximum speed; 0-20000mm per minute maximum working speed; 6.0kW water-cooling spindle multi head spindle power motor; 0-24000rpm 0-18000 rpm spindle speed; working mode stepper servo; AC 220V/50/60Hz, 1Ph(option: 380V, 3Ph) working voltage; Command Gcode, *uoo, *mmg, *plt; operating system DSP (digital signal processing) NC studio with computer; interphase USB; 32M flash memory; ER25 Collet; <0.01mm XY working delicacy; software artcam software UCANCAM or ARTCUT; running circumstance temperature: 0 deg Celsius-45 deg Celsius, relative humidity: 30%-75%; 3200x1960x1870mm packing size integrated; 2200kg net weight; 2500kg gross weight.	1		
<b>TOTAL</b>		<b>QTY</b>	<b>1</b>	<b>ESTIMATED COST</b>

**LOT-3: FABLAB ELECTRICAL ENGINEERING (ABC: PhP3,000,000.00, QTY: 1)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNT COST	ESTIMATED COST
unit	Small plastic injection molding machine. UP-128T. Injection Unit: 45mm screw diameter; 294 shot volume cu cm; 265g injection weight; 156MPa injection pressure; 200rpm screw speed. Clamping Unit: 1280kN clamping force; 350mm open stroke; 450mm maximum mold height; 135mm min mold height; 420*380mm space between tie bars; 38 kN ejector force; 120mm ejector stroke. Others: 16MPa pump pressure; 11kW motor/driving power; 7.7kW heating power; 4.2*1.2*1.8*m (LWH) machine dimension; 3.2T machine weight; 170li Oil tank. With molds for irrigation drippers.	1		
<b>TOTAL</b>		<b>QTY</b>	<b>1</b>	<b>ESTIMATED COST</b>

**LOT-4: FABLAB AGRICULTURAL ENGINEERING (ABC: PhP2,500,000.00, QTY: 1)**



UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNT COST	ESTIMATED COST
unit	Small plastic injection molding machine. UP-128T. Injection Unit: 45mm screw diameter; 294 shot volume cu cm; 265g injection weight; 156MPa injection pressure; 200rpm screw speed. Clamping Unit: 1280kN clamping force; 350mm open stroke; 450mm maximum mold height; 135mm min mold height; 420*380mm space between tie bars; 38 kN ejector force; 120mm ejector stroke. Others: 16MPa pump pressure; 11kW motor/driving power; 7.7kW heating power; 4.2*1.2*1.8*m (LWH) machine dimension; 3.2T machine weight; 170li Oil tank. With molds for irrigation drippers.	1		
<b>TOTAL</b>	<b>QTY</b>	<b>1</b>	<b>ESTIMATED COST</b>	

**LOT-5: FABLAB CIVIL ENGINEERING (ABC: 1,960,000.00, QTY: 5)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNT COST	ESTIMATED COST
unit	Single spindle shaper/wood spindle moulder machine, Forma 100, 1000x660mm table size, 120mm max working thickness, 3000 to 8000 rpm spindle speed, 50mm spindle diameter, 4kW, 1000x660x1000mm machine dimension, 330kg net weight	1		
unit	Wood cutting bandsaw, BS20, 3000W motor, 3500*10-40*0.62mm blade size, 595*495mm table size, 0-45 degrees table tilt, 475mm max cutting width, 280mm max cutting depth, 305kg gross weight, 1910*550*790mm packing size.	1		
unit	Horizontal Band saw, MJ1600E, 1600mm max sawing diameter, 4500mm max sawing wood length, 700mm saw diameter, 10-300mm sawing wood thickness, 22kW main motor, 1.5kW electric lifting, 7100mm band saw blade length, 5800 machine length, 1500kg total weight	1		
unit	Jointer planer, MB525, 500mm maximum planing width, 5mm maximum planing depth, 5000 rpm spindle speed, 4 blades, 2500mm total length of worktable, 4kW motor power, 550kg weight, 2500*910*1050mm overall dimensions	1		
unit	Mortising machine, MS3840, 6-26mm chisel capacity, 76mm maximum mortising depth, 3-16mm drill chuck capacity, 210mm chisel to table max, 1700mm overheight, 1400rpm spindle speed, 560*480*820mm packing base parts, 500*400*630mm, 500*400*639mm packing size.	1		
<b>TOTAL</b>	<b>QTY</b>	<b>5</b>	<b>ESTIMATED COST</b>	



## LOT-6: FABLAB MECHANICAL ENGINEERING 2 (ABC: PhP750,000.00, QTY: 2)

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNT COST	ESTIMATED COST
unit	3D printer with auto-bed leveling system: detachable single printing head, power failure recovery, filament short warning, auto leveling. FFF printing technology; 220*220*220mm printing size; 505*435*515mm product size; 535*465*675mm packing size; 450 deg Celsius maximum printing temperature; 90deg Celsius maximum chamber temperature; 35kg product weight; 55kg packing weight; platform: high viscosity fiberboard; 0.1-0.3mm layer thickness; single printing head; 0.4mm nozzle diameter; 0-150mm/s printing speed; STL, OBJ, g-code supported file type; up to 150 deg Celsius platform temperature, Carbon Fiber plate with auto-leveling; PEEK, ULTEM, PPSU, PA/CF, PC, PC alloy, PA, ABS, carbon fiber-filled, metal-filled, ASA, TPU, fiberglass-filled, HIPS, PVA, PETG, etc supported materials; 1.75mm filament diameter; X/Y: 12.5µm, Z:2.5µm position accuracy; 220V, 50-60Hz, 750W input; 24V DC output; SD card, usb, wifi connect methods; 12 mo. warranty; 3.5' touchscreen; Lemai, Cura, simplify 3D, compatible with other software.	1		
unit	3D printer. 40-120mm/s print speed; 370*380*388mm dimension (lwh); touch screen operation interface; AC 85-250V; 1.75mm PLA/ABS/PETG/TPU/HIPS filament; Standard 0.4mm nozzle diameter; 8.9kg weight; 0.1mm Fdm 3D printer precision; 190*190*145mm forming size;	1		
<b>TOTAL</b>		<b>QTY</b>	<b>2</b>	<b>ESTIMATED COST</b>