

**PEIERE BIEN LIRE ITB (FICHIER WORD) POUR SAVOIR LES CONDITIONS DE SOUMISSION ET LES DOCUMENTS DEMANDES**

**Pour la cotation , priere respecter l'ordre de ce tableau.**

**ANNEXE : LISTE DU MATERIEL ET SPECIFICATIONS**

SR.	CATEGORY	FIELD	MACHINE/EQUIPMENT/SOFTWARE	SPECIFICATIONS	QUANTITY
		Mechanical Design	Design computers	Work Station - desktop 3.1 GHz Intel Core i7, 8GB of 2666 MHz DDR4 RAM, Integrated Intel UHD Graphics 630	20
			Laptops	NVIDIA GeForce GTX 1650 with 4GB GDDR5 Graphics 9th Gen Intel Core i7-9750h (12MB Cache, up to 4. 5 GHz, 6 Cores), 16GB DDR4 2666MHz RAM	5
			Projector	Wattage 50watts Brightness 3300ANSI Lumen Controller type ButtonControl Item weight 2.4Kilograms Light source wattage 210Watts Minimum throw distance 2.02 Metres	1
			Softwares - Design softwares students version	SolidWorks students edition	25
				Autodesk Inventor AutoCAD Fusion 360	25
			Design computers	Work Station - desktop 3.1 GHz Intel Core i7, 8GB of 2666 MHz DDR4 RAM, Integrated Intel UHD Graphics 630	9

1	Design Lab	Electronic Design	Laptop	NVIDIA GeForce GTX 1650 with 4GB GDDR5 Graphics 9th Gen Intel Core i7-9750h (12MB Cache, up to 4.5 GHz, 6 Cores) 16GB DDR4 2666MHz RAM	15	
			Projector	Wattage 50watts Brightness 3300ANSI Lumen Controller type ButtonControl Item weight 2.4Kilograms Light source wattage 210Watts Minimum throw distance 2.02Metres	1	
		Softwares		Kicad Git	-	Open Source
				SolidWorks students edition	25	
				Eagle AutoCAD Electrical Fusion 360 - Electrical	25	might offer free softwares
		Embedded Systems and VR Studio	Training kits for Advanced level Embedded systems	Advanced	12	
			Training kits for Expert level Embedded systems	Expert		
			Gaming computers	i7 processor, NVIDIA Graphics card, 1TB storage	2	
			Oculus Quest 2	VR Kits	2	
		Robotics Lab	ROS		25	
			Myrobotlab.		25	
			KiCad EDA Software Suite.		25	
			Processing		25	
		Web Development	Mockplus	Free Online Software	25	
			Javascript	Free download	25	
			Bootstrap	Free software	25	
			VSCode	Free software	25	
			Git	Free Online Software	25	
			MAMP	Free Online Software	25	

		Creative Arts	Highly portable camera.	with lenses	3
			Tripod	UBeesize 67" Camera Tripod with Travel Bag	3
			External microphone	M-1 Video Microphone for DSLR Interview	3
			Camera lighting	Three-Point Lighting Kit	3
				Shields with concentrators	3
			Gimbal	Gimbal Stabilizer	3
			Video editing software	DaVinci Resolve 18 ( Has free version )	3
				Adobe after effects (Yearly Subscription)	2
				Adobe Photoshop	
				Adobe premiere pro (for all, 20+ installs )	
			Softwares	Canva	2
				Blender	2
				Gimp	2
			Video editing hardware	Loupedeck+ Photo and Video Editing Console	3
				Dell UltraSharp U2720Q 27" Monitor	3
				Logitech MX Master 3 Advanced Wireless Mouse	3
				CPU Workstations ( Lenovo Legion Tower 5i ) a) i7 four core Intel CPU (6-8 cores for desktops) b) Nvidia GTX 1050 GPU, or better c) 16 GB of RAM d) SSD (or upgrade to an SSD) e) USB 3.0 or USB-C ports (Thunderbolt 3 is becoming the norm)	3
				LAPTOPS ( Dell XPS 15 ) i7 four core Intel CPU (6-8 cores for desktops) Nvidia GTX 1050 GPU, or better 16 GB of RAM SSD (or upgrade to an SSD) USB 3.0 or USB-C ports	3
			Videography tool kit for vlogging	Youtube content creation	3
			Dummy Battery	For replacement batteries	3
			Capture Cards	As per function	4

(Videography,  
Sound studio,  
Fine arts)

High-Quality Memory Cards	High Speed UHS-I SDXC 128GB SD Card 90/60 MB/S U3 A1 Class-10 V30 Memory Card for SD Devices	5
Studio pro console	As per function	2
Editing consoles	As per function	3
Studio microphone	Upgraded USB Condenser Microphone for Computer	3
Midi pianos	Foldable Keyboard	3
Sound-Drum Controller	Native Instruments Maschine Mk3 Drum Controller	2
Sound Cards	For production	3
Speakers	For production	3
Studio microphone stands	Microphone stands	3
Mic stands	For performance	3
Performance speakers	For performance	3
Sound Cards	For performance	3
Production Softwares	Fruit-loops - Transferable	2
	Cubase - Transferable	2
Composition Softwares	Noteworthy - Transferable	2
	Finale- Transferable	2
Contemporary instruments	Guitar	2
	Electric Guitars	2
	Pianos	2
	Drum sets	2
	Saxophones	2
Classical performanceInstruments	Cello	1
	Violins	2
	Trumpets	2
Painting stands	To hold canvas of various sizes	5
Armatures and wires		7
Modeling tools	kit	5
Wood carving tools	tool set with different knives	5
Stone carving tools	stone bits	5
	chisel set	5

		Artcraft Stone Carving Set	5
Greentech	Plastic Shredder	Plastic Type: PVS,PET,PE,PA Machine Type:Plastic shredder Max. Production Capacity:500Kg/hr	1
	Soil nutrient analysis equipment	Repeatability error: ≤0.05% (0.0005 potassium dichromate solution) Detection Channels: 6Detection channels Linear error: ≤2% (0.02 copper sulfate detection)☐	1
	Solar training kits	Green energy teaching equipment, Solar training kit, Solar power generation experiment box	1
	Benchtop Mini Injection Molding Machine	Ejector stroke: 100mm Ejector Force: 1000KN Theoretical shot volume: 100cm <sup>3</sup> Injection rate: 50g/s	1
Foodtech	Industrial scale	100Kgs floor pan	2
	Industrial oven	Combination oven	2
	Spice / Grain grinder	Spice 3 cups	2
	Planetary mixer	Globe SP30P 30 Qt. Planetary Floor Pizza Mixer with Guard & Standard Accessories - 240V, 1 1/2 hp	2
	Kitchen weighing scale	Bowl, Timer, and Temperature Sensor, Digital Kitchen Weight (5kg)	2
	Grass juicer	Hamilton Beach HWG800 Wheatgrass Juicer	2
	Juicer	Zummo Z14-NGP Z14 Nature Graphite Commercial Juicer - 16 Fruits / Minute	2
	Food drier	Food Dehydrator Machine - 900-Watt	2
	Cold press oil machine	1800W Oil Press Machine 0-300°C	2
	Packaging Machine	Vacuum Sealer	2
	<b>Electrical / Electronics Prototyping:</b>		

CNC drilling machine	Working power: 300W; Net weight: 35KG. Spindle speed: 20000 revolve/min; 5. Support format: NC Drill and PCB2.8 format	1
Cutting machine	Overall dimension: width 280mm×length 400mm×height 250mm; Net Weight: 150KG. The biggest cutting plate thickness: 5mm;	1
Circuit board buffing machine	Power supply: AC380V/50Hz; power: 0.75KW; Dimension: 750mm×730mm×730mm; Weight: 50kg.	1
Through-hole plating machine	power: 1000W; Weight: 30Kg. power: AC220V/50Hz; Air pump parameters: gas flow: 20L/min; Net weight: 10Kg.	1
Screen printing machine	dimension: length 500mm×width 400mm×height 380mm; Screen printing area: 420mm×350mm; Regulation accuracy: 0.1mm;	1
Circuit board dryer	Heating power: 500W; Power supply: AC220V/50Hz; Weight: 30Kg. power: 550W; Time setting: 0~999min adjustable;	1
Laser printer	Power supply: AC220V 50HZ; Power: printing 550W, standby 27W, energy conservation 7W; Overall dimension: 268mm×368mm×360mm; Net Weight: 20Kg.	1

			Exposure machine	Exposure light: 3KW advanced special exposure lamp; Effective wavelength: 420-640nm; Vacuum pump: vacuum degree 99.5%, power 200W; Exposure time; 10-600s can be set; Power supply: 220V/AC 50Hz 3.2KW; Overall dimension: 1000mm×860mm×950mm; Net Weight: 120Kg. 9.Film laminator	1
			Film laminator	Display mode: liquid crystal display; Transfer printing speed: 0.5~1.2m/min adjustable; Heating mode: inner-heating silicon roller; Working voltage: 220V/50Hz; Heating tube power: 1000W; Overall dimension: length 450mm×width 600mm×height 350mm; Net weight: 40KG.	1
		Healthtech Edtech Fintech Tourism	Spray imaging machine	Maximum imaging size: 320mm×200mm double-sided board; Imaging mode: hanging double-sided spray imaging; Imaging time: 5S~99M59S adjustable; Imaging temperature: room temperature~55°C adjustable; Heating tube: 800W 316# stainless steel heating tube; Spray motor: 100W complete anticorrosive isolation pump; Imaging liquid volume: 20L (standard); Working power: AC220V/50Hz 1000W; Overall dimension: length 630mm×width 430mm×height 550mm; Net weight: 30KG	1

Spray etching machine	Dosage of etching liquid: 20L (standard); Working power: AC220V/50Hz 1000W; Overall dimension: length 630mm×width 430mm×height 550mm; weight: 30KG. Maximum etching size: 320mm×200mm double-sided board; Etching mode: hanging double-sided spraying etching;	1
Spray stripping machine	Maximum stripping size: 320mm×200mm double-sided board; Process mode: hanging double-sided spraying stripping; Stripping time: 5S~99M59S adjustable; Stripping temperature: room temperature~55°C adjustable; Heating tube: 800W titanium heating tube; Spray motor: 100W complete anticorrosive isolation pump; Dosage of stripping liquid: 20L (standard); Working power: AC220V/50Hz 1000W; Overall dimension: 630mm×430mm×560mm; Net weight: 30KG.	1
Tin-sinking machine	Input power: AC220V/50Hz; Entire machine power: 2200W; Overall volume: length 695mm×width 550mm×height 560mm; Net weight: 75KG. Process dimension: 320mm×200mm double-sided board.	1



Spray frame cleaner	Input power: AC220V/50Hz; Entire machine power: 2200W; Overall volume: length 695mm×width 550mm×height 560mm; Net weight: 75KG.	1
Alignment table	Light tube: 20 W x 4 lamp Contrapuntal area: 600*700mm Power supply: AC220V/80W; Weight: 30KG.	1
Digital Multimeter with clamp meters	Fluke 117 Digital Multimeter	2
	Fluke 101	3
	AstroAI Digital Clamp Meter Multimeter	5
Oscilloscope	input power:AC220/50Hz Weight 2.8kg Display type: TFT LCD	3
Signal Generator	Power supply ;DC5V±0.5V 2 channel DDS Function Generator 1Hz-100MHz 200MSa/s	3
Power supply(Variable)	Output voltage 0 ~ 30V Output current 0 ~ 5A Output power 150W Load regulation CV≤ 0.01% + 5mV, CC≤ 0.1% + 10mA	5
Spectrum analyser	input power: AC220v/50HZ; Channel 2; Bandwidth 70 MHZ; Oscilloscope Type Bench	1

## Energy

Soldering station	input power: AC220v/50HZ; Soldering Tip Temperature 450c; ESD safe Yes;	6
Circuit Board Holder	Solid metal base and ABS arm with spring-loaded clamp support 360 degree rotation Adjustable width and 4 clamping thickness size to accommodate various board sizes up to 200mm wide and up to 3mm thick Equipped with 4 rubber feet under the base ensure stability Lightweight and portable ideal	6
FA-400 Soldering Iron Smoke Absorber Fume Extractor	absorb smoke from 4-5 inches away low noise high energy saving small vibration Long-lasting working time for over 57000 hours.	6
Compressor	Weight- 25kg input power - 220v/50Hz motor rating 4.1 KW	1
Solar training kits	Green energy teaching equipment, Solar training kit, Solar power generation experiment box 620 * 425 * 180mm Power supply:AC220V±10%, 50HZ Power: ≤500W Temperature:-10°C~+40°C	1
Smart grid(solar,wind,fuel) cell training system	Smart Grid (Solar/Wind/Fuel Cell) Training System	1
Educational power training equipment	Educational Energy Power Training Equipment Fuel Cell Teaching Experiment Platform	1
Renewable Energy Trainer Solar Power Teaching System	Renewable Energy Trainer Solar Power Teaching System Educational Lab Equipment	1

	Electrical Vehicle Training Center	Electrical Vehicle Training Center , Hybrid Car Trainer .Hybrid And Ev Training Equipment 1500*1200*1800mm	1
Rapid Prototyping Space	CO2 Laser cutter	FSL PS36 P-Series Laser Cutting and Engraving System	1
	3D Printer	FDM 3D Printer, with accessories	2
	Formlabs SLA	Form 3+ with accesories	1
	3D Printer	CR-200B Fully Enclosed 3D Printer-200*200mm	5
	Vacuum former	Centroform EZFORM LV 1827	1
	Curing Station	Form Wash L & Form Cure L	1
	Vinylcutter	Vevor 14in/35mm	1
	3D Scanner	Creality CR Scan 01	1
Wood workshop	CNC Router	Bed size: 8 *4ft, Nema 34 Motors. 2,2KW Spindle	1
	Tape measure - 5 metre	Stanley's	5
	Steel square		5
	Hammer set		5
	G clamps (Small)	Small	5
	G clamps (medium)	Medium	5
	G clamps (Large)	Large	5
	Miter saw 12 "	Makita	2
	Cordless Drill	Makita	5
	Belt sander	Bucktool Combo 2' x 42" Belt Sander 6" Bench Grinder, Knife Sharpener with Large Work Table BG2600 Upgraded Model	3
	Bench Vice	8" Benchvice Tolsen	2
	Files (set)	Flat, Round	2
	Cable reel with industrial sockets	40m cable with industrial sockets	2
	Tool chest	Tolsen	1
	Rubber mallets	Tolsen	3
	Embroidery Machines	Janome memory craft 500E computerized Embroidery machine	4

Textile / Creative	CNC Fabric Cutter	Lectra Automatic fabric cutter	1
	Sewing Machines	Brother SE600 Computerized Sewing+Embroidery+Quilting Machine	4
		Heavy duty overlock machine	2
		Heavy duty lockstitch industrial sewing machine	4
	Laptops	NVIDIA GeForce GTX 1650 with 4GB GDDR5 Graphics 9th Gen Intel Core i7-9750h (12MB Cache, up to 4.5 GHz, 6 Cores) 16GB DDR4 2666MHz RAM	2
	High Precision CNC Milling machine	Spindle Speed(r.p.m): 50-15000 Table Travel (mm): 700*300 Number of Axes:3 Spindle power: 2HP Series: 1100M	1
	CNC Plasma	Bed size: 8 *4ft, Nema 34 Motors, Hypertherm 45 Source	1
	Welding Machine	ESAB Rebel EMP 205ic AC/DC Multi-Process MIG / STICK / TIG/ SPOT 100% Duty Cycle	2
	Angle grinders 4.5 "	Makita	5
	Angle grinders 9 "	Makita	5
	Miter saw 12 "	Makita	3
	12 " Chop saw	Makita	3
	Step Pully Drill Press	JET J-2500, 15-Inch Step Pulley Drill Press, 16 Speed, 1Ph 115V (354400)	3
	Power drills	Makita	5
	Cordless Drill	DEWALT 20V Max Cordless Drill / Driver Kit, Compact, 1/2-Inch (DCD771C2)	5
	Box Spanner set		5
	Adjustable Spanner set		5
	Allen key set	Black & Decker	5

Fabrication work

Screw driver set		5
Tape measure - 5 metre	Stanley's	5
Steel square		5
Hammer set		5
Hacksaw + Blades		5
Pipe wrench	KOTTO Heavy Duty Adjustable Pipe Wrench Set, Wrench Tool Set / Tool Box, Hand tools for Plumbing, 3 Pack Set, 8, 10, 12 Inches Wrench Set with Storage Bag	5
Rubber mallets	Tolsen	5
Pliers set e.g long nose	Tolsen	5
G clamps (Small)	HOZEON 4 PCS 4 Inch C Clamp Set, Heavy Duty G-Clamps with 4-Inch Jaw Opening Sliding T-Bar Handle for DIY Carpentry Woodwork Building	5
Files (set)	Flat, Round	5
Cable reel with industrial sockets	40m cable with industrial sockets	5
Tool chest	Tolsen	2
Bench Vice	8" Benchvice Tolsen	3
DIE GRINDING WHEEL	Pneumatic	3
Dial gauge	Dial Indicator with Magnetic Base and Point Precision Inspection Set, Long Arm 0-10mm Tester Gage Gauge 0.01mm, by NAKAO	5
Dremel tool with accessories	Dremel 8220-2/28 12-Volt Max Cordless Rotary Tool Kit with Battery, Carrying Case, 2 Attachments, 28 Accessories - Ideal for Maximum Performance Cutting, Sanding, Sharpening & Grinding	3
Belt sander	Bucktool Combo 2" x 42" Belt Sander 6" Bench Grinder, Knife Sharpener with Large Work Table BG2600 Ungraded Mode	3
Bench grinder	8-Inch (DW758)	2
Variable Speed Polisher with buffing	Variable Speed, Soft Start, 7-Inch/9-Inch (DWP849X)	3

			Drill Bits Sharpener	Drill Doctor DD500X Drill Bit Sharpener Portable Drill Bit Grinder End Mill Re-Sharpener with 11 Collects Angle Adjustable High-precision MR-13B (110V, CBN wheel for HSS)	2
			Magnets	Angular magnets	5
3	Intallation et Formation		Formation & Installation	28 à 42 jours pour 2/3 personnes sur site à Mamou, y compris transport et logement. Formation et les différents manuels et documents en Français	1
			Transport	DAP à Mamou, Guinée (fret maritime et routier)	1