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Department of Education

Applied Technology/Technology

Equipment List, Specifications and Tendering Guidance

Tendering Guidance

Important Notes to School's /ETB's seeking the items from this list:

1. Utilise existing procurement arrangement with suppliers/service providers where available
2. Search www.ogp.gov.ie to check if there is a suitable, fit for purpose framework/contract in place for all or some of the items required.
3. Choose to seek a request for quotation (RFQ), below the value of 25k, or a request for tender (RFT), above the value of 25k, based on best value for money using both qualitative and cost criteria. All procurement over the value of €25,000 must be advertised and published on www.etenders.gov.ie.
4. Seek quotations based on the items that can be competitively quoted from multiple suppliers based on the estimated level of spend following the procurement guidelines. For more advice on the procurement guidelines contact the Schools Procurement Unit (www.spu.ie) or Education Training Board with whom you are associated (list of ETBs on www.etbi.ie).
5. Suppliers may not be able to provide the full range of goods listed. In this case they should be requested to quote only for sections where they can supply all items in that section (excluding the equipment where a framework is in place such as TECH/B/201).
6. The specifications outlined in this document have been reviewed to ensure products of the highest quality are supplied. Substandard equipment should not be proposed or accepted under any circumstances and suppliers should be asked to replace these to the same standard set out or higher. Schools are advised to check this as part of the assessment before finalising the overall scores. In addition to pricing each item, suppliers must also specify the warranty being offered for each item.
7. All quotations must be excluding VAT with the VAT highlighted separately.
8. Contact the School Procurement Unit or your ETB for further specific guidance.

Applied Technology and Technology Equipment List A

Section 1: Drawing and Design

Code Quantity	Description and Specification	Cost (€) & Warranty Offered
TECH/A/101 1	Set of (magnetic) drawing equipment, for (magnetic) chalkboard, to include (i) compass with steel point (500mm), (ii) 60°/30° set square (500mm), (iii) 45° set square (500mm), (iv) protractor (425mm) and (v) heavy duty rule with bevelled edges (1000mm).	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/102(A) 24 right handed, 6 left handed	T-squares: A2 size, tape blade, best quality hardwood, with maple or acrylic edges to blade; blade screwed and dowelled to stock or equal.	
	Manufacturer: _____ Catalogue No.: _____	
OR		
TECH/A/102(B) 24 R/H, 6 L/H	Stainless steel T-square with fixed light cast aluminium head.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/103 25	Portable Desktop Drawing Board, A2 size, solid core/particle board/multi-ply, white high pressure laminate above and below, pvc edges and square corners, with rubber feet. Simple robust mechanism to allow use at 0° and 20°, with rubber tractor grip.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/104 25	Graphics/DCG wooden box set, to come with 4" acrylic protractor, 60°/30° & 45° Set Squares (transparent heavy duty, non-brittle plastic, with bevelled edge and open centre. Sizes: 200mm, 2mm thick), quickset adjustable compass, H and 2H pencils, Vinyl eraser, Metal sharpener and Clips.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/105 1	1000mm Steel rule.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/106 24	Scaled rule, acrylic, 300mm, suitable for graphics/drawing.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/107 25	300mm Steel rule.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/108 1	Circle template, acrylic type, c.2mm to 50mm diameter circles.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/109 1	Flexi-curve, suitable for technical graphics work.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/110 1	French curves, set of three, moulded plastic with ellipse form.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/111 1	Erasing shield, stainless steel type.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/112 1	50m Surveyor's fibre measuring tape.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/113 25	Cutting mat, A3 size, plastic, self-repairing.	
	Manufacturer: _____ Catalogue No.: _____	

TECH/A/114 25	Show-me boards, A3 size, gridded, with drywipe pens and eraser.		
	Manufacturer:	Catalogue No.:	
TECH/A/115 2	Scissors 250mm stainless steel.		
	Manufacturer:	Catalogue No.:	
TECH/A/116 24	Scissors 140mm, 25 no. right handed and 5 no. left handed.		
	Manufacturer:	Catalogue No.:	
TECH/A/117 2	Spray mount 400ml.		
	Manufacturer:	Catalogue No.:	
TECH/A/118 6 of each	Ready mixed water-soluble paint 500ml (red, green, brown, black, blue, yellow, white).		
	Manufacturer:	Catalogue No.:	
TECH/A/119 10	White foam board 3mm thick, 70x100cm.		
	Manufacturer:	Catalogue No.:	
TECH/A/120 1	5m Pocket measuring tape with 19mm blade.		
	Manufacturer:	Catalogue No.:	
TECH/A/121 12	Glue guns and 100 glue sticks.		
	Manufacturer:	Catalogue No.:	
TECH/A/122 1	Electronic Label maker, complete with tapes.		
	Manufacturer:	Catalogue No.:	

Section 2: Hand Tools

Code Quantity	Description and Specification	Cost (€) & Warranty Offered
TECH/A/201 24	Beech bench hooks.	
	Manufacturer: Catalogue No.:	
TECH/A/202 24	300mm Beech-handled tenon saw, brass back, min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/203 6	200mm Beech-handled dovetail saw, brass back, min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/204 12	Bench plane, smooth, 50mm cutter, adjustable for depth of cut/alignment, min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/205 12	Carpenters mallet, c.115mm, min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/206 24	Warrington hammer, weight: c.340 g, min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/207 12	Eclipse coping saw with 150mm blade	
	Manufacturer: Catalogue No.:	
TECH/A/208 12	Rosewood marking gauge – steel pin, thumbscrews, min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/209 12	Rosewood woodwork try-square, blade length: 150mm min., min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/210 6	Rosewood sliding bevel (woodwork), wooden handle, hardened steel blade, locking mechanism.	
	Manufacturer: Catalogue No.:	
TECH/A/211 1	Measuring tape, c.3m.	
	Manufacturer: Catalogue No.:	
TECH/A/212 12 of each size	Chisels (bevel edge): 6mm, 10mm, 18mm, 25mm min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/213 12 of each size	Splitproof Chisels (mortise): 6mm, 10mm, 18mm, 25mm min. 10 year warranty.	
	Manufacturer: Catalogue No.:	
TECH/A/214 1	Bit brace, c.250mm.	
	Manufacturer: Catalogue No.:	
TECH/A/215 1	Set of auger bits, c.6mm – c.25mm to suit TECH/A/114	
	Manufacturer: Catalogue No.:	
TECH/A/216 1	Set of flat bits, c.6mm – c.25mm to suit TECH/A/114	
	Manufacturer: Catalogue No.:	
TECH/A/217 6	Claw hammer, tempered/hardened head, wood/metal handle, 500g.	
	Manufacturer: Catalogue No.:	
TECH/A/218 1	Carpenter's pincers, c.180mm.	
	Manufacturer: Catalogue No.:	

TECH/A/219 1	Mallet, tinsmans type, c.45mm diameter head.		
	Manufacturer:	Catalogue No.:	
TECH/A/220 2	Mitre/corner clamp.		
	Manufacturer:	Catalogue No.:	
TECH/A/221 1	Hand Mitre Saw.		
	Manufacturer:	Catalogue No.:	
TECH/A/222 1	Set of c.5 hole-saws, complete with arbor, sizes from c.20mm to c.60mm diameter.		
	Manufacturer:	Catalogue No.:	
TECH/A/223 12 of each type	Files, smooth, 250mm: Half round Hand Round Square Three square		
	Manufacturer:	Catalogue No.:	
TECH/A/224 65	File handle for 250mm file, plastic or wooden.		
	Manufacturer:	Catalogue No.:	
TECH/A/225 6	Set of c.6 needle files.		
	Manufacturer:	Catalogue No.:	
TECH/A/226 24	"Abra" (or equal) file, 250mm, medium cut.		
	Manufacturer:	Catalogue No.:	
TECH/A/227 2	Engineer's inside spring caliper, c.150mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/228 2	Engineer's outside spring caliper, c.150mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/229 2	Precision Vernier caliper, capacity c.150mm, digital reading.		
	Manufacturer:	Catalogue No.:	
TECH/A/230 12	Engineer's spring divider, c.150mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/231 12	Engineer's centre punch, c.100mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/232 24	Engineer's fully integrated scribe, double ended, c.175mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/233 24	Engineer's steel square, blade c.120mm, min. 10 year warranty.		
	Manufacturer:	Catalogue No.:	
TECH/A/234 24	Stainless steel rule, pearl chrome finish, 300mm long, graduated inmm.		
	Manufacturer:	Catalogue No.:	
TECH/A/235 4	Universal bevel, (metalwork), c.150mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/236 2	Set of stocks (10), dies (10), taps and wrenches, ISO thread form, range from 3mm to 12mm. Circular die pattern. Set complete in strong case.		
	Manufacturer:	Catalogue No.:	
TECH/A/237 6	File card (wooden base type), c.100mm x c.50mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/238 2	Tinmans folding bars, c.250mm		
	Manufacturer:	Catalogue No.:	

TECH/A/239 1	Pop riveting kit, complete with pliers and assorted rivets, industrial grade.		
	Manufacturer:	Catalogue No.:	
TECH/A/240 12	Engineers ball-pein hammer, weight: 500 g (1 lb), min. 10 year warranty.		
	Manufacturer:	Catalogue No.:	
TECH/A/241 24	Tinmans snips, straight, c.200mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/242 24	Tinmans snips, curved, c.200mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/243 24	Eclipse hacksaw frame, 300mm, adjustable or fixed type.		
	Manufacturer:	Catalogue No.:	
TECH/A/244 100	Hacksaw blade, 300mm, 24 T.P.I.		
	Manufacturer:	Catalogue No.:	
TECH/A/245 12	Junior hacksaw frame and blades. Strong epoxy frame; spring steel blade with precision blade teeth min. 10 year warranty		
	Manufacturer:	Catalogue No.:	
TECH/A/246 12	Junior hacksaw blade pack (pack of 10)		
	Manufacturer:	Catalogue No.:	
TECH/A/247 1	Glass cutter, hand held, single or multi-wheel type.		
	Manufacturer:	Catalogue No.:	
TECH/A/248 1	Hand held engraver, variable speed, 230 V; 50 Hz.		
	Manufacturer:	Catalogue No.:	
TECH/A/249 2	Set of letter stamps, 5mm, set of 27, Grade A.		
	Manufacturer:	Catalogue No.:	
TECH/A/250 2	Set of 12 combination spanners, e.g., 8mm – 19mm, chrome finish.		
	Manufacturer:	Catalogue No.:	
TECH/A/251 2	Set of drills, HSS, parallel shank, c.1.0 to c.13mm x 0.5mm. Set in case.		
	Manufacturer:	Catalogue No.:	
TECH/A/252 1	Set of counter sink drills, HSS, 6mm, 8mm and 10mm. Parallel shank 90°.		
	Manufacturer:	Catalogue No.:	
TECH/A/253 2	Leather sandbag, c.250mm diameter.		
	Manufacturer:	Catalogue No.:	
TECH/A/254 2	Boxwood bossing mallet, c.50mm diameter head.		
	Manufacturer:	Catalogue No.:	
TECH/A/255 4	Vice grips, 250mm, lever release.		
	Manufacturer:	Catalogue No.:	
TECH/A/256 2	Sheet metal vice grip, 250mm, lever release.		
	Manufacturer:	Catalogue No.:	
TECH/A/257 6	Combination pliers, c.200mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/258 6	Long-nose pliers, c.200mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/259 6	Set of assorted flat and Philips head screwdrivers with plastic handles.		
	Manufacturer:	Catalogue No.:	
TECH/A/260 24	Nail punch, c.150mm		
	Manufacturer:	Catalogue No.:	

TECH/A/261 2	Set of Allen keys, e.g., 3mm - 10mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/262 1	Combination oilstone, c.200mm, coarse and fine faces.		
	Manufacturer:	Catalogue No.:	
TECH/A/263 1	Paper guillotine, capable of cutting up to A3 size paper.		
	Manufacturer:	Catalogue No.:	
TECH/A/264 6 of each size	G-clamps: 150mm 250mm 300mm		
	Manufacturer:	Catalogue No.:	
TECH/A/265 12	900mm Sash Cramps.		
	Manufacturer:	Catalogue No.:	
TECH/A/266 1	Lathe Pen turning kit: Kit to include: Dust free Collet, Colt HSS-M2 Parabolic fluted 7 x 150mm drill bit, Universal pen mandrel, Locknut kit, Pen Blank trimming tool, minimum 5 high quality pen kits, 7 & 10mm spacers to suit most sizes of pen kit.		
	Manufacturer:	Catalogue No.:	

Section 3: Power Tools

Code Quantity	Description and Specification Note: Portable Tools to be supplied as cordless appliances only, Where possible, the same brand to be supplied for all tools to ensure batteries are interchangeable	Cost (€) & Warranty Offered
TECH/A/301 1	18 volt Cordless Router, portable, with charger and two batteries Collet capacity: 10,000 – 30,000/min, Plunge Capacity: Trimmer 0-40mm, Plunge 0-35mm, Collet capacity: 3/8 inch and 1/4 inch, to include charger and two batteries. Minimum Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/302 1	Set of 12 Assorted Router Bits to suit TECH/A/301.	
	Manufacturer:	Catalogue No.:
TECH/A/303 1	c. 400mm X 400mm Non-Slip industrial quality Router Mat.	
	Manufacturer:	Catalogue No.:
TECH/A/304 1	18 volt Portable Jigsaw with toolcase, with charger and 2 batteries Bevel Capacity: 45°. Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/306 2	Portable min. 18 volt Orbital Sander with outlet compatible with Dust Extractor. To include charger and two batteries. Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/307 1	Portable min. 18 volt Palm Sander with outlet compatible with Dust Extractor. To include charger and two batteries. Minimum Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/308 6	Portable 12/24/110 V, 50 Hz Pyrograph Machine. Minimum Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/309 4	Rechargeable, minimum 18 V, Portable Cordless Drill with case, to include charger and two batteries. Minimum Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/311 1	Airbrush with fine, medium and heavy-duty head assemblies and long air hose for attachment to compressed air canister or air compressor.	
	Manufacturer:	Catalogue No.:
TECH/A/312 1	Portable oil-less diaphragm type air compressor for use with airbrush. Minimum Two year warranty.	
	Manufacturer:	Catalogue No.:

Section 4: Electronics and Control Technology

Note: This section can be quoted for separately.

Code Quantity	Description and Specification	Cost (€) & Warranty Offered
TECH/A/401 12	Digital multi-meter, auto-ranging frequency measurement, capacitance measurement and transistor test. Voltage a.c and d.c- c.5 ranges each from 200 mV x 100 mV to 600 V x 1 V Current a.c and d.c - c.4 ranges each from 2 mA x 1 mA to 10 x 10 mA Resistance - c.6 ranges from 200 R x 0.01 R to 20 M x 10 K Capacitance - c.5 ranges from 2000 pF x 1 pf to 20 mF 10 nF Frequency - c.5 ranges from 2 kHz x 1 Hz to 20 MHz x 100 kHz Diode test Continuity text Transistor test NPN and PNP Two year warranty.	
	Manufacturer:	
TECH/A/402 25	Handheld, programmable micro-computer Kit. Individually-programmable LEDs, 2 programmable buttons, Physical connection pins, Light and temperature sensors, Motion sensors (accelerometer and compass), Wireless Communication, via Radio and Bluetooth, USB interface. It should have the capability to be coded from any web browser in Blocks, Javascript, Python or Scratch. Kit to include USB connector, battery cage and protector case.	
	Manufacturer:	
TECH/A/403 30	All-in-one robotics board (for micro-computer specified in TECH/A/402).	
	Manufacturer:	
TECH/A/404 30	Straight single row PCB pin headers, 2.54mm, 36-way (for micro-computer specified in TECH/A/402).	
	Manufacturer:	
TECH/A/405 30	Edge connector breakout board (for micro-computer specified in TECH/A/402).	
	Manufacturer:	
TECH/A/406 90	Jumper Wires 20cm Male / Female.	
	Manufacturer:	
TECH/A/407 90	Alligator Clip with Pigtail (4 Pack).	
	Manufacturer:	
TECH/A/408 60	Right Angle Geared Hobby Motor.	
	Manufacturer:	
TECH/A/409 60	Linear Actuator kit.	
	Manufacturer:	
TECH/A/410 1	Sensors for air and weather, colour and light, and sound (for micro-computer specified in TECH/A/402).	
	Manufacturer:	
TECH/A/411 60	Mini 180 Degree Resin Gear Servo.	
	Manufacturer:	
TECH/A/412 30	Plastic Component Box - 15 Grid.	
	Manufacturer:	

TECH/A/413 1	Smart Home Kit, to include temperature sensor, sound sensor, crash sensor, servo, motor (for micro-computer specified in TECH/A/403). This kit should be capable of projects such as voice-activated light, smart fan, auto window and water level detector.	
	Manufacturer:	Catalogue No.:
TECH/A/414 10 of each	Pack/kit of accessories suitable for electronics work (i.e., push-fit directly to miniature motor shafts): Pack of c.10 plastic wheels, various diameter sizes (e.g., 30mm – 70mm) Pack of c.10 plastic propellers, c.100mm diameter, 2 or 3 blades. Pack of c.10 2mm steel shafting Pack of c.10 3mm steel shafting Pack of c.10 miniature pulleys, various diameter sizes (e.g., 8mm to 25mm) Pack of c.10 plastic gears, various diameter sizes (e.g., 15mm to 40mm) Pack of c.10 miniature worm gears.	
	Manufacturer:	Catalogue No.:
TECH/A/415 24	Electric soldering iron, extra fine tip for electronics, complete with stand and sponge, min...30 W, 220-240 V Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/416 6	Temperature controlled electric soldering iron/station, complete with stand and cleaning sponge, c.50 W, 220-240 V. Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/417 30	Miniature electronics tool kit, to contain tools such as pliers, snips, wire strippers and screwdrivers, in appropriate case.	
	Manufacturer:	Catalogue No.:
TECH/A/418 4	Helping-hands for soldering work.	
	Manufacturer:	Catalogue No.:
TECH/A/419 8	LT variable voltage power supply unit, overload protection. Performance (approx.): DC – 0-25 V (no load) and 24V (8 A load) AC – 0-25 V (no load) and 24V (8 A load) Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/420 3	De-soldering pump, portable type.	
	Manufacturer:	Catalogue No.:
TECH/A/421 2 of each colour	Single core wire, diameter, c.1.2mm x c.100 m length, to include: Black reels, Red reels, Blue reels	
	Manufacturer:	Catalogue No.:
TECH/A/422 2 of each colour	Stranded wire, diameter, c.1.4mm x c.100 m length, to include: Black reels, Red reels, Blue reels	
	Manufacturer:	Catalogue No.:
TECH/A/423 50	Extra flexible stranded wire, diameter, c.2.8mm x c.100 m length, to include: Red, and Black.	
	Manufacturer:	Catalogue No.:
TECH/A/424 1	Ribbon cable reel of wire, e.g., 20-way rainbow, c.25 m length.	
	Manufacturer:	Catalogue No.:
TECH/A/425 24	Cable Mounting Sockets 20 way.	
	Manufacturer:	Catalogue No.:

TECH/A/426 100 100 100 100	Pack/kit of 4mm plugs and sockets, to include: 4mm Plug Red 4mm Socket Red 4mm Plug Black 4mm Socket Black Manufacturer:	Catalogue No.:
TECH/A/427 30 30 30 30 30 30 300	Pack/kit of battery holders and clips, to include: 2XAA 4XAA 2XC 4XC 2XD 4XD PP3 battery snaps Manufacturer:	Catalogue No.:
TECH/A/428 5 200 200 200 200 200	Pack/kit of micro-miniature electrolytic capacitors, to include, Variety capacitor kit suitable for simple electronic circuit building 100uF 16v 220uF 16v 470uF 16v 1000uF 16v 2200uF Manufacturer:	Catalogue No.:
TECH/A/429 200 of each type	Resistors, to include: 270R 1K 2K2 4K7 10K 22K 33K 100K 150K 1M Manufacturer:	Catalogue No.:
TECH/A/430 50 of each type	Potentiometers, to include: 1K LIN 2200K LIN 10K LIN 47K LIN 100K LIN 1M LIN 100K LIN dual control (stereo) Manufacturer:	Catalogue No.:
TECH/A/431 1	Arm robot kit (for micro-computer specified in TECH/A/402). Manufacturer:	Catalogue No.:
TECH/A/432 150 of each type	Preset potentiometers (suitable for simple electronic circuit building), to include: 10K 22K 100K Manufacturer:	Catalogue No.:

TECH/A/433 80 of each type	Miniature motors, to include: High torque miniature motor, 3-6 V High power, 12 V motor Solar motor		
	Manufacturer:	Catalogue No.:	
TECH/A/434 200	Motor mount (e.g., self-adhesive) to suit miniature motors detailed in TECH/A/433.		
	Manufacturer:	Catalogue No.:	
TECH/A/435 10	Miniature multi-ratio gearbox and motor (clearbox motor), assembled OR in kit form, motor to operate on c.1.5-4.5 V power supply.		
	Manufacturer:	Catalogue No.:	
TECH/A/436 10	Miniature worm drive gearbox with motor, assembled or in kit form, motor to operate on c.1.5-4.5 V power supply.		
	Manufacturer:	Catalogue No.:	
TECH/A/437 1000	MES lamp (bulb), 6 V/60 mA, commercial grade.		
	Manufacturer:	Catalogue No.:	
TECH/A/438 1000	MES lamp (bulb) holder, solder tags at base.		
	Manufacturer:	Catalogue No.:	
TECH/A/439 1000	MES lamp (bulb) holder, spring loaded contact, fixing centres: c.23mm.		
	Manufacturer:	Catalogue No.:	
TECH/A/440 100 of each colour	Pack/kit of assorted colours MES lamp holders, to include: Red Green Orange		
	Manufacturer:	Catalogue No.:	
TECH/A/441 200 of each item	5mm LED's and clips, to include: Red Yellow Green Flashing 5mm bezel panel clips (one piece). Silicone rectifier diode IN4001 1A, 50V max. Silicone rectifier diode IN5401 3A, 100V max Seven segment LED display, common cathode, c.13mm		
	Manufacturer:	Catalogue No.:	
TECH/A/442 60	Light dependent resistor (ORP 12 specification)		
	Manufacturer:	Catalogue No.:	
TECH/A/443 100 10	Pack/kit of assorted sizes of strip-board, to include: 25mm x 64mm 119mm x 455mm		
	Manufacturer:	Catalogue No.:	
TECH/A/444 50	Pack/kit of breadboard, to include: 400 Tie points		
	Manufacturer:	Catalogue No.:	
TECH/A/445 50 of each type	Pack/kit of miniature relays, to include: DPDT 5A SPDT 5A SPDT 10A DPDT 8A		
	Manufacturer:	Catalogue No.:	

TECH/A/446 50 50	Pack/kit of NTC thermistors, to include: 5 k ohm 2700 ohm	
	Manufacturer:	Catalogue No.:
TECH/A/447 100 of each type	Pack/kit of general purpose transistors, to include: ZTX321 NPN specification BC108 NPN specification BFY51 NPN specification BC109 NPN specification TIP121 Darlington NPN specification	
	Manufacturer:	Catalogue No.:
TECH/A/448 50 25 25 15 15 15	Pack/kit of linear integrated circuits (ICs), to include: 555 Timer 741 Op Amp 3140 Op Amp 556 7400 7490	
	Manufacturer:	Catalogue No.:
TECH/A/449 25 25 100 25	Pack/kit of miniature speakers, for example: 8 ohm 64 ohm Buzzer, 6 V (leads) Miniature piezo buzzer	
	Manufacturer:	Catalogue No.:
TECH/A/450 75 of each type	Pack/kit of miniature switches, to include: Miniature toggle SPST Miniature toggle SPDT Miniature rocker Standard slide DPDTCO Push to make Push to break Push latching Tilt switch (mercury) Reed switch with magnets Microswitch button Microswitch lever Microminiature microswitch lever	
	Manufacturer:	Catalogue No.:
TECH/A/451 50	Pack/kit of miniature thyristors, to include: TIC106D specification	
	Manufacturer:	Catalogue No.:
TECH/A/452 100	Control knobs, to fit c.6mm shaft.	
	Manufacturer:	Catalogue No.:
TECH/A/453 10	Low-fume / colophony free solder, 500 g / 22 swg (0.71mm).	
	Manufacturer:	Catalogue No.:
TECH/A/454 6	Multiple drawer storage cabinets, plastic drawer type, wall mountable, c.60 drawer unit size.	
	Manufacturer:	Catalogue No.:
TECH/A/455 30	Multi-compartment boxes (e.g., plastic type), suitable for storing of electronic circuits / components.	
	Manufacturer:	Catalogue No.:

TECH/A/456 2	PCB Drill and stand set complete with power supply output of drill 12 V to 18 V. Chuck capacity 0.6mm to 3.2mm. Input of power supply unit 220 V to 240 V Two year warranty.	
	Manufacturer:	Catalogue No.:
TECH/A/457 1	Set of Control technology teaching kits. Kits to simulate control of manufacturing processes (e.g. conveyor, sorter, pick and place) and/or examples of control technology used in society (e.g. Car park barrier, lifts, sliding doors). Kit to be accompanied with associated guides/texts, and suitable for use with a class group of students.	
	Manufacturer:	Catalogue No.:
TECH/A/458 1	Robotic control technology, rover-style robot for demonstration purposes. Capable of object tracing and speech recognition.	
	Manufacturer:	Catalogue No.:
TECH/A/459 1	Electro-pneumatic teaching kit and suitable air compressor. Capable of allowing for the demonstration of a range of circuits/systems. Kit to be accompanied with associated guides/texts and suitable for use with a class group of students.	
	Manufacturer:	Catalogue No.:
TECH/A/460 1	Pneumatic system construction and simulation software to include library of standard pneumatic symbols; educational site license for min. 25 users.	
	Manufacturer:	Catalogue No.:

Section 5: Structure and Mechanisms

Code Quantity	Description and Specification	Cost (€) & Warranty Offered
TECH/A/501 1	Low cost construction set/kit, capable of allowing for the construction of models of various structures and mechanisms, e.g., bridges, towers, model automobiles, etc. A number to include appropriate power supply units.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/502 3 of each pack/ set	Pack/set of plastic gear wheels suitable for model building, preferably of the brass hub-type, to include: Pack c.10 12 teeth Pack c.10 18 teeth Pack c.10 30 teeth Pack c.10 58 teeth Pack c.10 bevel gear Pack c.10 worm gear	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/503 3 of each pack/ set	Pack/set of pulley's suitable for model building, preferably of the brass-hub type, to include: Pack of c.10 pulley's c.20mm diameter Pack of c.10 pulley's c.40mm diameter Pack of c.10 pulley's c.60mm diameter	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/504 10 of each pack	Pack of shafting/shaft converters to suit TECH/A/501 and TECH/A/502, to include: Pack of shaft converters (e.g., 6mm to 4mm and/or 4mm to 2mm) Pack of shafts (e.g., 6mm and/or 4mm shafts)	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/505 15 of each pack/set	Pack/set of plastic/wooden wheels suitable for model building/ construction work, to include: Pack plastic c.10 wheels c.60mm diameter Pack plastic c.10 wheels c.50mm diameter Pack wooden c.10 wheels c.25mm diameter Pack wooden c.10 wheels c.50mm diameter	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/506 1 box of each	M3 screws and nuts: Box M3 screws 6mm, pack of 100 Box M3 screws 12mm, pack of 100 Box M3 screws 20mm, pack of 100 Box M3 screws 25mm, pack of 100 Box M3 nuts, pack of 100 Box M3 washers, pack of 500	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/507 1 box of each	M4 screws and nuts: Box M4 screws 6mm, pack of 100 Box M4 screws 12mm, pack of 100 Box M4 screws 25mm, pack of 100 Box M4 nuts, pack of 100 Box M4 washers, pack of 500	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/508 2	Box of art straws.	
	Manufacturer: _____ Catalogue No.: _____	

Section 6: Safety Equipment

Code Quantity	Description and Specification	Cost (€) & Warranty Offered
TECH/A/601 1	Wall-Mounted First Aid Cabinet c.370mm X c.24mm with hinged door and equipped with minimum 24 person first aid kit. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/602 1	Set of minimum 6 / Laminated wall-mounted assorted Safety Signs. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/603 30	Non-mist Safety Goggles, full ventilation, suitable for use over spectacles, kite marked to BS 2092. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/604 2	Headband and ear cup type ear defenders. To be supplied with two sets of renewable sealing rings and to conform to EN352/BS5108. Attenuation to 20dB required. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/605 12	Clearways face shields with adjustable headbands. Full facial and eye protection while operating machine tools etc. Kite marked to BS2092. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/606 30	Student aprons suitable for workshop use. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/607 1	Soap/hand cream dispenser.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/608 2	Roll of Hazzard Warning Floor Tape, 50x3300mm, Yellow-Black. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/609 12	Lightweight safety spectacles with fully adjustable side frames and clear side shields, fitted with replaceable lens to BS 2092. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/610 6	Pair Gloves for materials handlings, abrasion and cut resistant; oil, grease and dirt repellent. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/611 6	Fume displacement unit, replaceable filter type, bench mounted, 230 V, 50 Hz.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/612 6	Plastic bin, minimum 80 litres. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	
TECH/A/613 1	Roll of hand paper, 200mm wide, on roller stand. Product available from PPE and First Aid Framework.	
	Manufacturer: _____ Catalogue No.: _____	

TECH/A/614 24	Banister type c.300mm X 50mm flat-backed Bench Brush. Resin set pure bristle. Product available from PPE and First Aid Framework.	
	Manufacturer:	Catalogue No.:
TECH/A/615 4	600mm Sweeping Brush with Handle. Product available from PPE and First Aid Framework.	
	Manufacturer:	Catalogue No.:
TECH/A/616 1	Industrial wet/dry vacuum; Robust electrical vacuum cleaner for wet and dry use for cleaning up dust, debris or water, minimum 1400-watt motor, minimum 20 litre capacity, Dust class category M rated to EN60335-2-69, for dust with workplace limit values > 0.1 mg/m ³ , to include HEPA Cartridge filter, minimum 3 meter hose, air flow sensor to indicate when the air flow is reduced by a clogged filter, full tank, etc., base includes wheels/castors for easy manoeuvring Minimum 2 year warranty	
	Manufacturer:	Catalogue No.:

Note: Equipment to be commissioned and training provided where appropriate. Where servicing is required during the warranty period then the cost should be included in the tender price.

Equipment for Applied Technology/Technology TECH/A			
Section	Code	Description and Specifications:	Total Cost €:
Section 1	TECH/A/101-122	Drawing and Design	
Section 2	TECH/A/201-266	Hand Tools	
Section 3	TECH/A/301- 312	Power Tools	
Section 4	TECH/A/401- 460	Electronics and Control Technology	
Section 5	TECH/A/501- 508	Structure and Mechanisms	
Section 6	TECH/A/601- 616	Safety Equipment	

Total (€)	
Add for VAT (€)	
Total amount for List A (€)	

Standards, Specifications and Conditions

**All Equipment shall be Durable and Safe for School Use.
Equipment wholly or partly funded from public funds is subject to Inspection by
Officers from the Department of Education.**

It is essential that tenders for equipment for School Use shall:

- i) Comply fully with the specifications and be durable and safe for School Use.
- ii) Comply fully with the standards as detailed and shall comply fully with European (EN) standards, both established and developing.
- iii) Comply with European electrical standards and CE marking as appropriate.
- iv) Be accompanied by documentation of sufficient detail for full evaluation.
- v) Include the completed and signed certificate of compliance.

Award of a contract is conditional on the production of a current tax clearance certificate.

Failure to comply with the above may result in the tender being deemed null and void.

Certificate of Compliance with Standards, Specifications & Conditions:

I/We certify that the equipment tendered complies in all respects with the Standards, Specifications and other requirements/conditions specified in this tender document.

I/We hold a current tax clearance certificate.

Company: _____

Signed: _____ Date: _____

Position: _____

Applied Technology and Technology Equipment List B

Section 1: Machine Tools and Storage

Code Quantity	Description and Specification	Cost € & Warranty Offered		
TECH/B/101 1	<p>Vertical Bandsaw</p> <p>Floor-standing, Min. Cutting Height 310mm, Min. Cutting Width 420mm, Tilting Table to 45 degrees, Rip Fence Aluminium on Cast Iron Mounting with Steel rail, slot in work table to accept mitre guide, mitre guide to be supplied, Upper and Lower Precision Guides in steel, DC Electronic Brake Unit and over load protection, Non- latching emergency stop on bottom of frame, Locks on Door, minimum 3HP, 3 phase</p> <p>Bi-metal (M42) blade to be supplied for metal cutting, GP 3/8" (10mm) x 8 TPI Carbon steel Blade for cutting plastics 1 Rip Saw wood blade 3/4" (20mm) x 4 TPI, and 1 General Purpose wood 3/8" (10mm) x 6 TPI</p> <p>Follow Health & Safety advice regarding use of this machine and age restrictions on its use; Statutory Instruments (SI) No. 36 of 2016 Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2016</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Manufacturer:</td> <td>Catalogue No.:</td> </tr> </table>	Manufacturer:	Catalogue No.:	
Manufacturer:	Catalogue No.:			
TECH/B/102 2	<p>Scroll Saw, 450 mm, with tilt table, variable speed motor, sawdust blower, workpiece hold-down and blade guard attachment. Motor c.120-200 W, 230 V.</p> <p style="color: red;">Three year on-site warranty to include parts and labour.</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Manufacturer:</td> <td>Catalogue No.:</td> </tr> </table>	Manufacturer:	Catalogue No.:	
Manufacturer:	Catalogue No.:			
TECH/B/103 1	<p>Magnetic folding machine, Capacity: 1250 x 1,6 mm at 400 N/mm², 230 volt.</p> <p>To be supplied with: Wide clamping bar, narrow clamping bar, slotted clamping bar for shallow boxes, segmented clamping bar (finders), sheet support.</p> <p style="color: red;">Three year on-site warranty to include parts and labour.</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Manufacturer:</td> <td>Catalogue No.:</td> </tr> </table>	Manufacturer:	Catalogue No.:	
Manufacturer:	Catalogue No.:			
TECH/B/104 1	<p>Guillotine-Notcher, bench mounted type, table size: c.500 mm x 400 mm, max. capacity in ferrous metals: c.1.5 mm, max. capacity in non-ferrous metals: c.3 mm.</p> <p style="color: red;">Three year on-site warranty to include parts and labour.</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Manufacturer:</td> <td>Catalogue No.:</td> </tr> </table>	Manufacturer:	Catalogue No.:	
Manufacturer:	Catalogue No.:			
TECH/B/105 1	<p>Wood Turning Lathe, c.400 W (0.5 HP), floor-standing with faceplate, c.610 mm between centres, 2 Bar bed, variable speed (c.450-2000 rpm).</p> <p style="color: red;">Three year on-site warranty to include parts and labour.</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Manufacturer:</td> <td>Catalogue No.:</td> </tr> </table>	Manufacturer:	Catalogue No.:	
Manufacturer:	Catalogue No.:			

TECH/B/106 2	Drilling Machine, single phase, floor-standing, keyless chuck, cast iron table, tool free belt tensioning, safety guards, weight to exceed 70kg. To be supplied with drill press table to safely secure smaller work pieces. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/107 1	Belt sander, c.150 mm wide belt, bench or floor mounted. Fitted with dust extraction facility in accordance with Circular Letter M45/01. Electrics: 230V, 50Hz. Larger machines NOT suitable, for Health and Safety Reasons. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/108 1	Vacuum form cutting machine, bench mounted type, complete with adjustable tilting table, guide fence and dust extraction outlet facility, Electrics: 230 V, 50 Hz. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/109 1	Vacuum forming machine, bench top model, cut sheet size min. 250 mm x min. 450 mm. Electrics – 230 V, 50 Hz. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/110 3	Thermoplastic sheet Strip Heater, 110 V 50Hz 500 mm suitable for bending thermoplastic sheets up to c.6 mm thick. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/111 1	Plastic dip coating unit. Minimum capacity 50 litres. Supplied complete with air blower and air pressure regulator together with 20 kg packs of two different colours of polyethylene powder. Electrics: 230 V, 50 Hz. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/112 1	Electric Sharpening system: grinding stone size x width 250mm x 50mm; stone grit K220; leather honing wheel size x width 200 x 30mm; rotation speed min: 80rpm; include jig for straight edges, plane irons, ripping chisels; include angle setting jig for measuring exact angles and settings. Single phase. Three year on-site warranty to include parts and labour.	
Manufacturer:		Catalogue No.:
TECH/B/113 4A 2	Tool storage presses for hand tools, lockable, approximate size 1900mm x 1000mm x 500mm. These to be supplied with cut-out slots.	
Manufacturer:		Catalogue No.:
OR		
TECH/B/113B 2	Tool storage presses for hand tools, lockable, approximate size 1900mm x 1000mm x 500mm. These to be supplied with storage trays	

Section 2: Digital Technologies and Computer Aided Manufacturing (CAM)		
Code Quantity	Description and Specification	Cost € & Warranty Offered
TECH/B/201 1	Laptop suitable to run laser cutter and 3D printer, to be supplied with a case and wireless optical mouse. Optional purchasing details https://www.pdsttechnologyineducation.ie/en/Technology/Purchasing-Frameworks/ 2 Year warranty.	
	Manufacturer:	
TECH/B/202 1	Visualiser: Min. 13 MP Lens, Up to 4K at 30 fps Video, Built-In Mic, coverage A3 + (533x330mm), USB Interface & Power Connection to a PC. 5 year warranty.	
	Manufacturer:	
TECH/B/203 1	3D Printer: Min area 200mm x 200mm x 200mm, Suitable for education purposes (not DIY/home spec.) and capable of high quality printing, user-friendly software based on open-source platform (Compatible with Parametric Modelling software used in Design and Communication Graphics (DCG)), Support materials such as PLA, Fully enclosed print chamber, and Technical support must be available. Roll of PLA to be provided with machine. Two year on-site warranty to include parts and labour.	
	Manufacturer:	
TECH/B/204 1	Portable CNC design/vinyl cutter, min. material width 500mm, min. material thickness 0.7mm, to include appropriate computer operating software. 2 no. 1 metre vinyl rolls to be supplied. Floor stand as opposed to bench mounting. Three year on-site warranty to include parts and labour.	
	Manufacturer:	
TECH/B/205 1	Laser cutter/engraver: CO2, workable on a variety of materials, minimum engraving area 400mm x 300mm, accommodate minimum 100mm thickness, minimum 30-80 Watt laser tube, open source software and driver, Raster & Vector operating modes, single phase, must come with a Vector grid, Air compressor and Fume extraction system, and Technical support must be available. 2 year on-site warranty on machine and CO2 tube. NOTE: Only 1 laser cutter to share between Engineering, Technology and Construction Studies room. If school offers any of these three subjects (or are getting an upgrade to any of these rooms) they are entitled to get a laser cutter. Location of laser cutter is identified on each of the room layouts.	
	Manufacturer:	

Note: Equipment to be commissioned and training provided where appropriate. Where servicing is required during the warranty period then the cost should be included in the tender price.

Equipment for Applied Technology/Technology TECH/A			
Section	Code	Description and Specifications:	Total Cost €:
Section 1	TECH/B/101-114	Machine Tools and Storage	
Section 2	TECH/B/201-205	Digital Technologies and Computer Aided Manufacturing	

Total (€)	
Add for VAT (€)	
Total amount for List B (€)	

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I/We certify that the equipment tendered complies in all respects with the Standards, Specifications and other requirements/conditions specified in this tender document.

I/We hold a current tax clearance certificate.

Company: _____

Signed: _____ Date: _____

Position: _____

Statutory Instruments (SI) No. 36 of 2016 Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2016

Notes regarding Training, instruction and information are detailed in **Statutory Instruments (SI) No. 36 of 2016 Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2016**. This full document should be considered if a school is using the machines outlined in the document.

A few key notes include:

- An employer shall ensure that an employee who operates a woodworking machine—
 - o (a) has been trained in operating the machine,
 - o (b) has received instruction in accordance with paragraph (2)(a), and
 - o (c) has been provided with the information specified in paragraph (2)(b).

- An employer shall ensure that in advance of operating a wood-working machine an employee shall—
 - (a) receive instruction on—
 - (i) the dangers arising in connection with the machine, the precautions to be observed and the requirements of the Regulations in this Part which apply to the machine,
 - (ii) how to use the guards and any other protection measures required to be provided by Regulation 199 and Regulations 201 to 207 which relate to the machine, and
 - (iii) procedures for setting up, adjusting, using and cleaning the machine, and
be provided with information on the use of the machine, including where relevant—
 - (i) the speed, range, type and dimensions of tools suitable for the machine, (ii) any limitation on the cutting speeds of the machine, particular operations or size and material of any workpiece,
 - (iv) procedures relating to the repair or replacement of any guard or protection device,
 - (v) the availability, suitability and use of any additional protection device, (v) safe methods of handling tools, 8 [36]
 - (vi) correct procedures for start-up, shutdown and isolation of the machine, taking into account the time required for all parts of the machine to come to a halt, (vii) procedures for cleaning the machine,
 - (vii) procedures for setting or adjusting any guard, tool, clamp or other part of a machine, and
 - (viii) in the case of CNC machines, programming.