



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier : HYTEC POWER, INC.	P.O. No. : 20-12-1590
Address : No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila	Date : December 23, 2020
E-mail Address : <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement: Public Bidding
Telephone No. : 0917-308-3531	
TIN : 229-283-188-000	
Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0	

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapasan Misamis Oriental Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection Unit: Contact No. 0926-1777-499	Delivery Term :
Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed	Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
1	users	<b>Electronic Circuit Design and 3D Simulation Software (20 users)</b> <b>Offer: TINA Design Suite</b> Features and Capabilities: 1. Schematic Editor 2. Schematic Symbol Editor 3. Footprint Editor 4. Netlist Editor 5. Live 3D Breadboard Tool 6. Advanced PCB Designer a. Automatic and Manual Design Tools b. Creating flex PCB's c. Animated 3D view 7. Electrical Rules Check(ERC) 8. Interpreter 9. Library Manager 10. Parameter Extractor 11. Text and Equation Editor 12. DC analysis 13. Transient Analysis 14. Fourier analysis 15. Digital Simulation 16. HDL Simulation (VHDL, Verilog, Verilog-A, Verilog-AMS) 17. Microcontrollers (MCU) Simulation a. MCU Simulation and Debugging (PIC, AVR, 8051, 8085, HCS, ARM) b. Linux and Android Simulation (ARM) c. Mixed Spice Simulation (Berkely and Xspice) 18. Flowchart Editor and Debugger 19. AC analysis 20. Network analysis 21. Noise analysis 22. Symbolic analysis 23. Monte-Carlo and Worst-case analysis 24. Design Tool 25. Optimization 26. Post-processor 27. Presentation 28. Interactive mode 29. Virtual Instruments a. Digital Multimeter b. Function Generator c. Storage Oscilloscope d. Signal and Network Analyzer	20	44,450.00	889,000.00

**TOTAL BROUGHT FORWARD P 889,000.00**

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:

**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 697-2020

Very truly yours,

**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus

Conforme:

**HENRIDINO Z. RAMACHO JR**



University of Science and Technology of Southern Philippines

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

**PURCHASE ORDER**

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Navaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		
Purpose	: Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0		

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 : Unit. Contact No. 0926-1777-499 Delivery Term :

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
			<b>TOTAL CARRIED FORWARD</b>		<b>889,000.00</b>
		e. Digital Signal Generator			
		f. Logic Analyzer			
		30. Real-time Test & Measurements			
		31. Training and Examination			
		a. Learning Management Tool – Simulator's Training Supervisor			
		b. Teach and Learn Troubleshooting			
		c. Problem Solving			
		d. 1200 circuits and Integrated E-Books			
		COMPONENT MODELS INCLUDED IN THE SOFTWARE:			
		1. Passive components			
		a. Resistor			
		b. Potentiometer			
		c. Thermistor			
		d. Lamp			
		e. Capacitor			
		f. Lossy capacitor			
		g. Charged capacitor			
		h. Inductor			
		i. Energy-storing			
		j. Inductor			
		k. Coupled Inductors			
		l. Non-Linear coil			
		m. Transformer			
		n. Relay			
		o. Diodes (including Zener, Multi-color LED, Varicap, Schottky, Graetz, diode arrays)			
		p. Motor			
		q. Transmission Line			
		r. Fuse			
		2. Active components			
		a. Bipolar transistor (NPN and PNP)			
		b. Darlington transistor			
		c. MOS transistor (including BSIM3 models)			
		d. JFET (N and P channel)			
		e. IGBT			
		f. Thermistor			
		g. Thyristor			
		h. Triac			
		i. Diac			
		j. Ideal or nonlinear			
		k. Operational amplifier			
		l. Transient and average SMPS models			
			<b>TOTAL BROUGHT FORWARD</b>		<b>P 889,000.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 697-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus

Conforme:



University of Science and Technology of Southern Philippines

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

**PURCHASE ORDER**

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Navaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		

Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection Delivery Term :  
 : Unit. Contact No. 0926-1777-499

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
			<b>TOTAL CARRIED FORWARD</b>		<b>889,000.00</b>
		m. Manufacturer made Spice models			
		n. Optoelectronic components (photodiode, phototransistor, solar cell, optocoupler)			
		3. Sources			
		a. Current source			
		b. voltage source			
		c. current generator			
		d. voltage generator			
		e. standard and arbitrary user-defined waveforms			
		f. PWL			
		g. WAV file			
		h. Linear and nonlinear controlled sources (CCCS, VCCS, CCVS, VCVS)			
		i. Digital pulse source, digital clock			
		4. Basic digital components			
		a. AND			
		b. OR			
		c. NAND			
		d. NOR			
		e. XOR gates with 2, 3 and 4 inputs			
		f. Buffer			
		g. Tri-state buffer			
		h. Inverter			
		i. Schmitt			
		j. Inverter			
		k. D flip-flop			
		l. SR flip-flop			
		m. JK flip-flop			
		n. D latch			
		5. Digital IC			
		a. MCU(PIC, AVR, ARM, 8051)			
		b. 4000 logic family			
		c. 74000 logic family			
		d. VHDL to test and build your own logic components			
		e. FPGA and CPLD libraries			
		6. Measuring Instruments			
		a. Voltage meter			
		b. Voltage pin			
		c. Test point (for real time measurement)			
		d. Ampere meter			
		e. Current arrow			
		f. Power meter			
		g. Impedance meter			

**TOTAL BROUGHT FORWARD P 889,000.00**

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 697-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus

Conforme:



University of Science and Technology of Southern Philippines

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

**PURCHASE ORDER**

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier : HYTEC POWER, INC.  
 Address : No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila  
 E-mail Address : [dino.ramacho@gmail.com](mailto:dino.ramacho@gmail.com)  
 Telephone No. : 0917-308-3531  
 TIN : 229-283-188-000

P.O. No. : 20-12-1590  
 Date : December 23, 2020  
 Mode of Procurement: Public Bidding

Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapasan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 Unit. Contact No. 0926-1777-499  
 Delivery Term :

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed  
 Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
<b>TOTAL CARRIED FORWARD</b>					<b>889,000.00</b>
		7. Other components			
		a. Time controlled switch			
		b. Voltage controlled switch			
		c. AD and DA converter			
		d. Timer			
		e. Comparators			
		f. Analog control blocks			
		g. Pull-up resistor			
		h. Seven-segment display			
		i. Keypad			
		j. Voltage regulator			
		k. Vacuum tube			
		l. Passive and active RF components			
		m. Two ports (S, Z, Y H)			
		Minimum hardware and software requirements			
		1. Intel Pentium or equivalent processor or above			
		2. atleast 1 GB of RAM or higher			
		3. atleast 300 MB of available hard disk space			
		4. CD-ROM (in case of CD ROM installation)			
		5. Mouse or touchpad			
		6. VGA adapter card and monitor			
		7. Microsoft Windows 9x/ ME/ NT/ 2000/ XP / Vista/ Windows 7 Windows 8/Windows 10			
		8. Supported Networks (for Network versions): MS Windows 2000/2003/2008/2012 server or later, Linux Server, Novell Netware			
2	units	<b>Electronic Application Trainer</b> <b>Offer: Micro Computer Control Equipment MTS-101</b> The training shall be a complete tutorial board in the study of Arduino programming and applications. The training kit shall have the following technical specifications:	3	204,750.00	614,250.00
		1. Power Supply (Built-in), · Input: AC 110/220V, 50/60Hz · Output : +5V/1.5A, +3.3V/0.5A · Surface Mounted LED for power indicator · 33uH Surface Mounted Inductor · Mounted 1x8 Female Dupont Connector x3 · Mounted LOW-Drop Voltage Regulator (LD1117A) for power regulation · Surface Mounted 2.5A 16V F250L Self recovery fuse-in · Surface Mounted 1N5822 · DC/DC converter IC (AP1501) · Mounted 16v 330uF Capacitor x3			
<b>TOTAL BROUGHT FORWARD</b>					<b>P 1,503,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 697-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP-CDO Campus

Conforme:



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		

Purpose : Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 : Unit. Contact No. 0926-1777-499

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
			<b>TOTAL CARRIED FORWARD</b>		<b>1,503,250.00</b>
		2. Control Board			
		· Arduino UNO R3			
		· Core: ATMEGA328P Digital IO : 14 (D0~D13)			
		· Analog IO : 6 (A0~A5)			
		· PWM Output : 6 (D3, D5, D6, D9, D1, D11)			
		· Support AREF pin			
		· Support TX/RX pin			
		· Support I2C interface			
		· Support ISP download			
		· Programming Interface: USB Type-B			
		· With mounted parallel Female Dupont connector for upgrade module			
		3. Input Module			
		Digital Input			
		· 4x4 Key Pad:			
		o tact switch button with HIGH initial state			
		o Mounted 1x8 female Dupont connector for controls			
		o Network Resistor Array (10K , 9pins)			
		· DIP Switch 8bits:			
		o Mounted 1x8 female Dupont connector for controls			
		o Network Resistor Array (10K , 9pins)			
		Analog Input			
		· Slide Potentiometer:			
		o 20KΩ x 2			
		o Mounted 1x2 female Dupont connector for controls			
		· Joystick x 1 :			
		o Vertical, Horizontal and Middle Button			
		o Mounted 1x3 female Dupont connector for controls			
		· Microphone x 1 :			
		o Mounted Dual OP-Amp (LM358)			
		o Surface Mounted Resistors: 1k, 10k, 3.3k, 47k			
		o Mounted Female Dupont Connector for controls			
		Sensor Input			
		· CDS Sensor x 1 : with Mounted Female Dupont Connector for controls			
		· Temperature & Humidity Sensor x 1: with Mounted 1x2 female Dupont Connector for controls			
		· Accelerometer: 3-axis, with mounted 1x5 Female Dupont Connector for controls			
		· Ultrasonic Sensor x 1: with mounted 1x2 Female Dupont Connector for controls			
		Connector for IR LINE Tracer controls			
<b>TOTAL BROUGHT FORWARD</b>					<b>P 1,503,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:

**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 697-2020

Conforme:

*Handwritten signature*

Very truly yours,

**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus



University of Science and Technology of Southern Philippines

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

**PURCHASE ORDER**

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier : HYTEC POWER, INC.  
 Address : No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila  
 E-mail Address : [dino.ramacho@gmail.com](mailto:dino.ramacho@gmail.com)  
 Telephone No. : 0917-308-3531  
 TIN : 229-283-188-000

P.O. No. : 20-12-1590  
 Date : December 23, 2020  
 Mode of Procurement: Public Bidding

Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapasan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection Delivery Term :  
 Unit. Contact No. 0926-1777-499

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
			<b>TOTAL CARRIED FORWARD</b>		<b>1,503,250.00</b>
		4. Output Module			
		- LED Matrix Display:			
		o 8x8			
		o driver IC (ULN2803A,74HC138, 4801)			
		o 10k surface mounted resistor x8			
		o 100 Ohms surface mounted resistor x8			
		o mounted 1x4 and 1x8 Female Dupont Connector for controls			
		- 4-Digit 7-Segment Display:			
		o Common-Anode			
		o Driver IC (4801 x2),			
		o 150 Ohms surface mounted resistor x9,			
		o 10K surface mounted resistor			
		o Mounted 1x5 and 1x8 Female Dupont connector for controls			
		- LED Bar:			
		o 10 bits (Common-Anode)			
		o 1x10 Female Dupont connector for controls			
		- RGB LED x 4:			
		o Driver IC (4801 x2)			
		o 10k surface mounted resistor x4			
		o 1k surface mounted resistor x3			
		o Mounted 1x8 Female Dupont connector for controls			
		- High Power LED x1:			
		o 1W (Common-Anode)			
		o Driver IC (4801)			
		o 560 ohms 1/2W resistor			
		o 10K surface mounted resistor			
		o Mounted 1x2 female Dupont connector for controls			
		- Serial RGB LED x 20:			
		o 1x1 DIP switch for power			
		o 0.1uF surface mounted Capacitor			
		o Mounted 1x2 Female Dupont connector for controls			
		- LCD Display 16x2 (serial and Parallel Control):			
		o Mounted 1x11 Female Dupont connector for parallel control			
		o Mounted 1x2 Female Dupont connector for Serial Control			
		o Mounted 1bit DIP switch for Power			
		o Mounted IC Driver (PCF8574 Remote 8-Bit I/O Expander) for Serial Control			
		o Surface Mounted resistors for serial connection:			
		150 Ohms, 2K, 10K, 1.8K x2			
		o Surface Mounted 10K Trimmer Potentiometer			
		- Relay: 5V, x2			
		o Driver IC (4801)			
		o Surface mounted Diode for protection			
		o Surface Mounted LED for triggered indicator			
			<b>TOTAL BROUGHT FORWARD</b>		<b>P 1,503,250.00</b>

Checked and verified by:  
**MELANI A. JALOVER**  
 Head, Procurement Services  
 PR No. 697-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chanceller, USTP-CDO Campus

Conforme:



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier : HYTEC POWER, INC.  
 Address : No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila  
 E-mail Address : [dino.ramacho@gmail.com](mailto:dino.ramacho@gmail.com)  
 Telephone No. : 0917-308-3531  
 TIN : 229-283-188-000

P.O. No. : 20-12-1590  
 Date : December 23, 2020  
 Mode of Procurement: Public Bidding

Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapasan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 Unit. Contact No. 0926-1777-499  
 Delivery Term :

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed  
 Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
<b>TOTAL CARRIED FORWARD</b>					<b>1,503,250.00</b>
		o Resistors: 470 Ohms x2, 10K Ohms x2			
		· DC Motor : 5V, x2			
		o Surface Mounted Motor Driver IC (L293D)			
		o 4.7K Ohms Surface Mounted Resistor x2			
		o 1N4001 Surface Mounted Diode x8			
		o Mounted 1x6 Female Dupont connector for controls			
		· Step Motor : 12V, 7.5 deg / tick			
		o Surface Mounted Motor Driver IC (L293D)			
		o 4.7K Ohms Surface Mounted Resistor x2			
		o Mounted 1x62 Female Dupont connector for Comm controls			
		o Mounted 1x6 Female Dupont connector for step controls			
		o Mounted 2bit DIP Switch for power			
		· Servo Motor : 4.8V~6V , x 2			
		o 4.7K Ohms Surface Mounted Resistor x2			
		o Mounted 1x2 Female Dupont connector for controls			
		o Mounted 1x6 Male Dupont connector for motor control			
		· Electromagnetic Buzzer x 2			
		o Surface Mounted FET x2			
		o Mounted 1x2 Female Dupont connector for control			
		o Surface Mounted Resistor 1.8K			
		5. Communication Module			
		· Wi-Fi: ESP8266 x 1			
		o Mounted 1x4 and 1x8 Female Dupont connector for control			
		o Surface Mounted 10k Resistor			
		· Bluetooth: HC05 x 1			
		o Mounted 1x2 Female Dupont connector for Transmitter and Receiver			
		6. Other Module			
		· Solderless Breadboard: 81x62mm, 456 tie points			
		The kit shall be used to perform the following experiments and applications:			
		· Buzzer application: Mono tone output / Multi tone output / Sona playing			
		· LED matrix display: Static and dynamic			
		· 4-digit 7-segment display: Basic output / Digital clock			
		· Relay control			
		· High power LED application: PWM control with slide potentiometer and PC			
		· Microphone application: Noise detection			
		· CDS application: Light detector			
		· Classical RGB LED control: Static / Dynamic display			
		· Serial RGB LED control: Color control			
		· Parallel LCD display control: Static display			

**TOTAL BROUGHT FORWARD P 1,503,250.00**

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 497-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP-CDO Campus

Conforme:



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		

Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection Delivery Term :  
 : Unit. Contact No. 0926-1777-499

Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
<b>TOTAL CARRIED FORWARD</b>					<b>1,503,250.00</b>
		<ul style="list-style-type: none"> <li>· Serial LCD display control: Display temperature</li> <li>· Ultrasonic application: Distance measurement</li> <li>· Infrared application: Line tracer</li> <li>· Servo motor application: Control with slide potentiometer and joystick</li> <li>· Accelerometer application: Balance detection</li> <li>· DC motor application: Speed and direction control</li> <li>· Step motor application: Unipolar and Bipolar control</li> <li>· Bluetooth application: Connect to mobile phone</li> <li>· Wi-Fi application: Connect to cloud</li> </ul> The set shall have the following accessories: 1. English Experiment manual x1 2. Software / Source Code CD x 1 3. AC Power Cord x 1 4. USB cable (Type-A to Type-B) x 1 5. Flat cable (5x2 pin) x 1 Dupont wire x 40			
3	unit	<b>MICROCONTROLLER TRAINER</b> <b>Offer: Micro Computer Control Equipment MTS-887</b> The Training System shall have the following features: <ul style="list-style-type: none"> <li>· Uses 8-bit microcontroller, to implement various I/O control experiments.</li> <li>· Contains most of the powerful functions in modern MCUs nowadays</li> <li>· Can be used for automation, motor control, device measurement, and mechanical controls...etc.</li> <li>· Its popular and well-known by its economic cost,</li> <li>· Wide applicability,</li> <li>· High accessibility and reliable stability.</li> <li>· Contains several peripheral devices, from basic LED to advanced capacitive sensing module</li> <li>· Combination of these devices enable to create different kind of control experiments.</li> <li>· Together with friendly experiment manual</li> <li>· Can learn the control of MCU more conveniently and efficiently.</li> <li>· Ideal for beginners of learning programming language.</li> <li>· Each experimental block uses individual control switch to avoid interference if sharing pin.</li> <li>· Pins of the microcontroller have been connected to the peripherals inside the trainer.</li> </ul> There is no need to connect it manually. <ul style="list-style-type: none"> <li>· "Reset" button: to reset the chip if errors occur.</li> <li>· Development interface is reserved for advanced learners.</li> </ul>	1	241,000.00	241,000.00
<b>TOTAL BROUGHT FORWARD</b>				<b>P</b>	<b>1,744,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 197-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus

Conforme:





# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		
Purpose	: Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0		

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapaan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 : Unit. Contact No. 0926-1777-499 Delivery Term :  
 Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
			<b>TOTAL CARRIED FORWARD</b>		<b>1,744,250.00</b>
		which can connect the external modules to the chip pins. This training equipment shall compose of the following Specifications: 1. PIC16F887 chip x 1 (1) 40 pins(35 input/output pins) (2) 368 bytes RAM memory (3) NanoWatt Technology (4) (4) 10-Bit Analog-to-Digital (A/D) Converter (5) Operating Frequency (0~20MHz) 2. UART to USB Interface x 1 3. EEPROM 64Kbits x 1 4. 20 x 2 character LCD x 1 5. 4-digit 7-segment display x 1 6. Capacitive sensing button x 1 7. LED x 11 8. 8 x 8 multicolor dot matrix LED display x 1 9. Buzzer and status LED x 1 10. 5K variable resistor x 1 11. AD590 temperature sensor x 1 12. Stepping motor and status LED 7.5 degrees x 1 13. 10 x 2 extend socket x 2 14. Slide switch x 8 15. 4 x 4 matrix keypad x 1 16. Built-in power supply : Input : 100~240VAC, 50/60Hz, 0.65A Output : 12V/1.2A, 5V/2.1A, 3.3V/1A Output : 12V/1.2A, 5V/2.1A, 3.3V/1A Experiments for: 1. Basic I/O Controls 2. External Interrupt I/O Experiment 3. Chip Clock 4. Watch dog Timer 5. Timer 6. UART 7. I2C 8. LCD module experiment 9. Temperature Measurement experiment 10. LED matrix display experiment 11. Stepping Motor experiment 12. Capacitive touch sensing experiment This Training Equipment must supply with this following Accessories 1. A.C. power cord 1pc			
			<b>TOTAL BROUGHT FORWARD</b>		<b>P 1,744,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 497-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus

Conforme:



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		
Purpose	: Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0		

Gentlemen:  
Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapanan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 Unit. Contact No. 0926-1777-499  
 Delivery Term :  
 Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed  
 Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
			<b>TOTAL CARRIED FORWARD</b>		<b>1,744,250.00</b>
		2. Fuse 1pc			
		3. Experiment manual written in English 1pc			
		4. Experiment CD (working codes of the performable experiments) 1pc			
		5. USB A-B type cable, 150cm 1pc			
		6. IDC cable 10x2 pin, 20cm 1pc			
		7. Dupont Line 1P-1P, 150mm 20pc			
		8. 6pin Programmer Cable 1pc			
		9. Microchip PICkit 3 debugger/programmer			
4	unit	<b>Advanced Process Welding Machine</b> <b>Offer: Titan XQ350 plus CW HP</b>	1	3,472,000.00	3,472,000.00
		Features:			
		1. Energy-saving			
		2. Connection capability for remote control and function torch			
		3. IP23 spray water protected			
		4. Individually configurable programmes for each welding task			
		5. Adjustable start and end-crater functions			
		Includes:			
		1. Advanced Process Welding Machine			
		2. Wheel Kit with Cylinder Bracket			
		3. Welding Torch Cooling System			
		4. Water-cooled MIG/MAG Welding Torch			
		5. 5 x Contact Tip 0.8mm, 1.0mm and 1.2mm			
		6. 2 x contact tip holder 31.5 mm and 34.5 mm			
		7. gas nozzle 11 mm, 13 mm and 16 mm			
		8. gas diffuser			
		9. torch key			
		10. gas nozzle cleaner			
		11. Water-cooled TIG Welding Torch			
		12. 2 Torch Caps (short, long)			
		13. 3 electrode holders			
		14. Insulator			
		15. 6 tungsten electrodes			
		16. MMA Fully assembled electrode holder with cable			
		17. Main Connection Lead			
		Advanced Process Welding Machine Specification:			
		Process: SMAW, GMAW, FCAW, GTAW			
		Setting range for welding current: 5A-350A			
		Duty Cycle:			
		350A / 80%			
		320A / 100%			
				<b>TOTAL BROUGHT FORWARD</b>	<b>P 5,216,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:

**MELANIE A. JALOVER**  
Head, Procurement Services  
PR No. 697-2020

Very truly yours,

**ATTY. DIONEL O. ALBINA**  
Chancellor, USTP CDO Campus

Conforme:

*HELENINO B. RAMACHO JR*



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier : HYTEC POWER, INC.  
 Address : No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila  
 E-mail Address : [dino.ramacho@gmail.com](mailto:dino.ramacho@gmail.com)  
 Telephone No. : 0917-308-3531  
 TIN : 229-283-188-000  
 Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

P.O. No. : 20-12-1590  
 Date : December 23, 2020  
 Mode of Procurement: Public Bidding

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapisan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 Unit: Contact No. 0926-1777-499  
 Delivery Term :  
 Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed  
 Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
<b>TOTAL CARRIED FORWARD</b>					<b>5,216,250.00</b>
		Open Circuit Voltage: 82V Wire Feed Speed: 5m/min - 25 m/min 19,685 ipm - 984,253 ipm Spool Diameter: D200/D300 Generator Rati: 21 kVA Power Consumption: 35W Protection Classification: IP23 <b>Advance Virtual Welding Trainer</b> <b>Offer: Soldamatic (Welding Training &amp; Performance Digitalization Solution)</b> Features: •Replicates proper machine set-up. Students must select gas type, process, gas flow, amperage/voltage and wire-feed speed •Five educational welding coupons: Overlapped plate, V-Butt plate, T-Anaeld plate to plate, V-Butt pipe, T-Anaeld pipe to pipe •Extremely realistic weld puddle is visually and audibly responsive to operator behavior, helping welders learn when to adjust welding technique. Welding discontinuities appear when improper •Simulates sparks, slag, grinding and weld cooling. •Welding discontinuities appear when improper welding technique is used. •Tracks and scores key weld parameters •Replay mode •Welding Coupon can be rotated 360 deg in any angle Processes: • Simulated SMAW • Simulated GTAW • Simulated GMAW • Simulated FCAW Equipment Details: Input Power: 230V/60Hz Single User MIG/MAG Welding Machine for Training (2 units) Specifications: • Multiprocess inverter welding machine • Non-latched/latched operation • Adjustable gas pre- and post-flow time • Portable, compact • Easy, tool-free change of welding polarity • IP23 spray water protected • Wire spool diameter up to 200 mm/D200	1	4,578,000.00	4,578,000.00
<b>TOTAL BROUGHT FORWARD</b>				<b>P</b>	<b>9,794,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:

**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 687-2020

Conforme:

**HENRIDINO S. RAMACHO JR**

Very truly yours,

**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus



University of Science and Technology of Southern Philippines

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

**PURCHASE ORDER**

PRN: USTP-GSPB-11-5060602000/1060501000-2020  
 Enduser : Engr. Romano A. Pimentel  
 Location of Project: USTP-CDO Campus

Supplier : HYTEC POWER, INC.  
 Address : No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila  
 E-mail Address : dino\_ramacho@gmail.com  
 Telephone No. : 0917-308-3531  
 TIN : 229-283-188-000  
 Purpose : Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0

P.O. No. : 20-12-1590  
 Date : December 23, 2020  
 Mode of Procurement: Public Bidding

Gentlemen:  
 Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery : SUPPLY OFFICE, USTP-CDO Campus, Lapisan Misamis Oriental  
 Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection  
 Unit. Contact No. 0926-1777-499  
 Date of Delivery : Ninety (90) calendar days upon receipt of Notice to Proceed  
 Delivery Term :  
 Payment Term :

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
<b>TOTAL CARRIED FORWARD</b>					<b>9,794,250.00</b>
		<ul style="list-style-type: none"> <li>● Overvoltage protection</li> <li>Setting range for welding current: 5 A - 180 A</li> <li>Duty cycle 40 °C:</li> <li>180 A / 25 %</li> <li>120 A / 60 %</li> <li>100 A / 100 %</li> <li>Open circuit voltage: 80 V</li> <li>Mains voltage: 230 VAC Single Phase</li> <li>Tolerances: -40 % up to +15 %</li> <li>Mains frequency: 60 Hz</li> <li>Wire feed speed:</li> <li>1 m/min - 15 m/min</li> <li>39.37 ipm - 590.55 ipm</li> <li>Spool diameter: D200</li> <li>Protection classification: IP23</li> <li>Includes Welding Accessories</li> <li>TIG/MMA Welding Machine for Training (2 units)</li> <li>Specifications:</li> <li>● TIG Welding</li> <li>● Electronic HF start</li> <li>● TIG lift arc welding without HF</li> <li>● MMA pulse welding and pulsed TIG welding up to 2 kHz</li> <li>● Non-latched/latched operation</li> <li>● Reduced secondary current accessible using torch trigger</li> <li>● Adjustable up-slope and down-slope time</li> <li>● Adjustable gas pre- and post-flow time</li> <li>● MMA welding</li> <li>● Adjustable hot start current and hot start time</li> <li>● Adjustable Arcforce</li> <li>● Antistick function</li> <li>● Portable, compact</li> <li>● Overvoltage protection</li> <li>● Energy-saving</li> <li>Setting range for welding current: 5 A - 200 A</li> <li>Duty cycle 40 °C:</li> <li>200 A / 25 %</li> <li>150 A / 60 %</li> <li>140 A / 100 %</li> <li>Open circuit voltage: 90 V</li> <li>Mains voltage: 230 VAC Single Phase</li> <li>Tolerances: -40 % up to +15 %</li> <li>Mains frequency: 60 Hz</li> </ul>			
<b>TOTAL BROUGHT FORWARD</b>					<b>P 9,794,250.00</b>

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:  
  
**MELANIE A. JALOVER**  
 Head, Procurement Services  
 PR No. 687-2020

Very truly yours,  
  
**ATTY. DIONEL O. ALBINA**  
 Chancellor, USTP CDO Campus

Conforme:  
  
**MELANIE A. JALOVER**



# University of Science and Technology of Southern Philippines

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

## PURCHASE ORDER

PRN: USTP-GSPB-11-5060602000/1060501000-2020

Enduser : Engr. Romano A. Pimentel  
Location of Project: USTP-CDO Campus

Supplier	: HYTEC POWER, INC.	P.O. No.	: 20-12-1590
Address	: No. 2 T. Cruz St. Cruzville Zabarte Road Novaliches, Quezon City, Metro Manila	Date	: December 23, 2020
E-mail Address	: <a href="mailto:dino.ramacho@gmail.com">dino.ramacho@gmail.com</a>	Mode of Procurement:	Public Bidding
Telephone No.	: 0917-308-3531		
TIN	: 229-283-188-000		
Purpose	: Re-bidding of the Proposed Procurement for the Supply, Delivery, Installation and Commissioning of Various Technology Laboratory Equipment to Improve the teaching and learning of Engineering Technology Programs Through Upgrading of Facilities Aligned to Industry 4.0		

Gentlemen:  
Please furnish this office the following articles subject to the terms and conditions contained herein:

Place of Delivery	SUPPLY OFFICE, USTP-CDO Campus, Lapanan Misamis Oriental Contact Person for Delivery: Mr. Felix V. Saquilayan, Head Inspection Unit. Contact No. 0926-1777-499	Delivery Term	:
Date of Delivery	: Ninety (90) calendar days upon receipt of Notice to Proceed	Payment Term	:

Stock No.	Unit	Description	Qty.	Unit Cost	Amount
<b>TOTAL CARRIED FORWARD</b>					<b>9,794,250.00</b>
6	sets	Includes Welding Accessories <b>Standard Welding Gear Package</b> <b>Offer: Welding Gear Ready-Pak</b> Include the following: Automatic Welding Helmet Welding Backpack Welder's Glove Full-view Goggles Soft Plastic Welding Safety Glasses Welding Jacket Leg and foot protection with Velcro fastener Welding apron	4	14,250.00	57,000.00
7	unit	<b>FUME EXTRACTOR</b> <b>Offer: ProfiMaster 2 m</b> Mobile filter unit for low to medium quantities of fumes/dust Powerful filter and sturdy construction Filter monitoring increases safety Convenient filter replacement via access door For use at two workstations Engine Output: 1.1 kW Extraction capacity 2 x 750 m³/h Noise level 72 dB(A) TERMS AND CONDITIONS: Warranty: One year on parts and service. (Bidder may opt to offer additional warranty service) • Equipment shall be supplied with training manuals in English • Supplier must submit brochures/catalogue indicating the brand name and model of bid item/s additional technical requirements. Failure to submit will be grounds for disqualification. • Bidder must provide After Sales Training onsite or online if travelling is still prohibited during the COVID-19 pandemic • Bidder must attach pictures of their training center and also pictures of after sales training of faculty conducted at their training center as additional • If bidder is an authorized distributor/reseller of the bid item/s, bidder must attach supporting documents from the manufacturer to support such claim. • Bidder must be authorized from the manufacturer to provide technical training and support and must attach supporting documents.	1	141,000.00	141,000.00

**GRAND TOTAL : NINE MILLION NINE HUNDRED NINE TWO THOUSAND TWO HUNDRED FIFTY PESOS ONLY P 9,992,250.00**

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one (1) percent for every day of delay shall be imposed.

Checked and verified by:

**MELANIE A. JALOVER**  
Head, Procurement Services  
PR No. 497-2020

Very truly yours,

**ATTY. DIONEL O. ALBINA**  
Chancellor, USTP CDO Campus

Conforme:

*Handwritten signature*