



University of North Alabama  
Office of Procurement  
UNA Box 5025  
Florence, AL 35632  
Phone: (256)765-4206  
Fax: (256)765-4329

**Bid No. 2021-10 For: Mechatronics Workstation**

**Page 1 of 9**

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**INVITATION FOR BIDS:**

Sealed Proposals for furnishing materials, equipment or services as described herein will be received at the Purchasing Department, Bibb Graves Hall, Room 126, University of North Alabama, Florence, Alabama, until 2:00 p.m. local time on January 7, 2021.

It is understood that the owner may accept any or all items at the prices listed in this proposal within a noted timeframes on the specification page. Time is of the essence to this bid and if delivery is not made within the time specified, the University reserves the right to cancel any order placed as a result of this bid. This bid may be withdrawn at any time prior to the scheduled time for the opening of bids, or any authorized postponement thereof.

**DIRECTIONS FOR MAILING BIDS:**

**Do not place more than one bid in an envelope. Envelopes containing more than one bid may not be opened in time for a bid to be considered.**

Envelopes containing bids must be sealed, marked and addressed as follows:

|               |                                                                                                                                                                   |                                                                                                                                                                      |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADDRESSED TO: | (If via any postal service<br>University of North Alabama<br>Purchasing Department - Bid 2021-10<br>UNA M/S 5025<br>One Harrison Plaza<br>Florence, AL 35632-0001 | (If hand carry)<br>University of North Alabama<br>Purchasing Department - Bid 2021-10<br>Bibb Graves Hall, Room 126<br>One Harrison Plaza<br>Florence, AL 35632-0001 |
| BID FOR:      | Mechatronics Workstation<br>Bid No. 2021-10                                                                                                                       |                                                                                                                                                                      |

**CAUTION** – The above mailing address line, UNA Box 5025, is the address for the University of North Alabama Central Mail Room and is not part of the physical address for the University of North Alabama Purchasing Department. Envelopes or packages addressed to this box number may not be received in the Purchasing Department by the specified bid due date and time. It is the bidder's responsibility to ensure that the bid is received in the Purchasing Department by the date and time specified; no assumptions should be made in regard to an extension due to unforeseen circumstances of any kind, no due date or time will change without advance written notice from the Procurement Office.

Bidders are strongly cautioned to mail or ship bids to allow ample time for receipt in the Purchasing Department, not the Central Mail Room nor Central Receiving. Overnight or next day delivery services may not be adequate. Since bids must be received in a sealed envelope, faxed or emailed bid copies cannot be accepted.

**Bids received in the Purchasing Department after the specified date and time set forth above will not be considered**

**Bids will be opened in Bibb Graves Hall, Room 126 at 2:00 p.m. local time on January 7, 2021.**

Revised 1/30/08

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**I have read and understand the contents of this page**



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**Page 2 of 9**

***INSTRUCTIONS TO BIDDERS***

1. All bidders are to submit bids on proposal forms furnished by the Assistant Vice President of Business Services, University of North Alabama (forms enclosed). All bid forms are to be signed in all designated spaces by an authorized officer or employee of the bidder. Telephone bids will not be accepted. Bids submitted by "fax" machine will not be accepted. All bids are to be mailed or delivered in a sealed envelope.
2. All bidders shall base their proposals on the exact schedule of equipment, material or service specifications herein.
3. Pictures, descriptions, and specifications should accompany all bids when required or desirable. Samples may be required and, if so, shall be furnished free of cost to the Owner.
4. Reference to manufacturers, suppliers, catalog numbers, etc., is intended to set quality standards and does not preclude bids from others as long as quality standards are met. Offers of equal items shall state the brand and number or level of quality. Alternates will not be considered unless they conform to the specifications.
5. All bidders are required to submit unit prices and extended prices, where applicable, for each item bid. Where the unit price and the extended total price do not agree, the unit price shall prevail.
6. The Owner reserves the right to accept any or all items on any bidder's proposal at the unit price submitted. The Owner reserves the right to reject any and all bids and to waive informalities.
7. All prices submitted on the proposal are to be delivered prices to the University of North Alabama and shall not include any state or local sales tax.
8. Bidders should sign & return all pages of the complete bid to imply complete understanding and compliance with all bid requirements.
9. All questions should be directed to the Purchasing Office, University of North Alabama, UNA Box 5025, Florence, AL 35632-0001, phone 256/765-4206.
10. Should a bidder find discrepancies in, or omissions from the bid documents or should he be in doubt as to their meaning, he should at once notify the Owner who will send written instructions to all bidders.
11. Bids received after the bid opening date and time, or any authorized postponement thereof, will not be considered.
12. **If required, a bond may be requested and must be supplied within forty-eight (48) hours after request to protect the University from any risk of loss.**
13. **EQUAL EMPLOYMENT OPPORTUNITY/U.S. FAIR LABOR STANDARDS ACT:** By signing this proposal, bidder certifies that bidder is in compliance with the nondiscrimination clause contained in Section 202, Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex, or national origin, and the rules and regulations prescribed by the Secretary of Labor, Veteran's Act 38USC4212, Section 503 - Rehabilitation act of 1973 Title I of the Americans with Disabilities Act of 1990 42USC12101, and that any and all goods were produced in compliance with all applicable requirements of Sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.
14. Verbal communication before or while Bid is open shall have no force or affect whatsoever toward this bid as written, or the entire agreement. All parties represent that no promises, representations, or inducements have been made with respect to the subject matter of the bid nor a contract, except as specifically set forth herein. The bid or final contract, agreement, or order, can only be changed, altered, modified or amended by written agreement from both parties.

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**I have read and understand the contents of this page**



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**Page 3 of 9**

=====

**PROPOSAL FORM**

In compliance with the University of North Alabama **INVITATION FOR BIDS** and **INSTRUCTIONS TO BIDDERS**, the undersigned hereby proposes to furnish and supply items to the University of North Alabama, Florence, Alabama, in strict accordance with the **SCHEDULE** and **SPECIFICATIONS**.

The undersigned bidder/proposer hereby certifies that it, its officers, partners, owners, providers, representatives, employees, and parties in interest, including the affiant, has not in any way colluded, conspired, connived or agreed, directly or indirectly, with any other bidder/proposer, potential bidder/proposer, firm or person, in connection with this solicitation, to submit a collusive or sham bid/proposal, to refrain from bidding/proposing, to manipulate or ascertain the price(s) of other bidders/proposers or potential bidders/proposers, or to secure through any unlawful act an advantage over other bidders/proposers or the university.

The prices submitted herein have been arrived at in an entirely independent and lawful manner by the bidder/proposer without consultation with other bidders/proposers or potential bidders/proposers or foreknowledge of the prices to be submitted in response to this solicitation by other bidders/proposers or potential bidders/proposers on the part of the bidder/proposer, its officers, partners, owners, providers, representatives, employees, or parties in interest, including the affiant.

**DATED:** \_\_\_\_\_

**COMPANY NAME:** \_\_\_\_\_

**BY:** \_\_\_\_\_

(Signature)

\_\_\_\_\_  
(Typed or Printed Name)

\_\_\_\_\_  
(Title)

**BUSINESS ADDRESS:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
**TELEPHONE:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_  
*This address will be used to publish the bid tabulation & any other communication regarding bid results*

If Bidder is a Corporation, write the State of Incorporation, and if a Partnership, give full name of partners, using space below.

\_\_\_\_\_ **initial**  
**I have read and understand the contents of this page**



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**Page 4 of 9**

=====

**UNIVERSITY OF NORTH ALABAMA**  
**VENDOR CERTIFICATION**  
**PURSUANT TO ACT NO 2012-491 & ACT2014-044**

ALABAMA LAW (SECTION 31-13-9 , CODE OF ALABAMA 1975: By signing a contract resulting from this proposal, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the state of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom.

ALABAMA LAW SECTION 16-25-26C , CODE OF ALABAMA 1975; Legislation requiring the University of North Alabama to report to Retirement Systems of Alabama individuals paid for personal services who are currently receiving benefits from TRSA or ESA became effective October 1, 2013. No minimum level of compensation was defined. **Any individual receiving direct or indirect compensation from this contract who is a retiree receiving benefits from the State of Alabama Retirement System MUST NOTIFY UNA of this status along with Bid/RFP Submission.**

Bidder hereby certifies full compliance with Act No. 2012-491 & Act No. 2014-044:

Date: \_\_\_\_\_

Company: \_\_\_\_\_

Authorizing Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_ County of \_\_\_\_\_

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**Page 5 of 9**

**CERTIFICATE OF COMPLIANCE WITH THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 2011-535, as amended by Act 2012-491)**

**DATE:** \_\_\_\_\_ **RE: Contract/Grant/ Incentive (describe by number or subject):**

**BID/RFP** \_\_\_\_\_ **by and between**

\_\_\_\_\_ (Contractor/Grantee) and

\_\_\_\_\_ (State Agency, Department or Public Entity)

The undersigned hereby certifies to the State of Alabama as follows:

1. The undersigned holds the position of with the Contractor/Grantee named above, and is authorized to provide representations set out in this Certificate as the official and binding act of that entity, and has knowledge of the provisions of THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 201 1-535 of the Alabama Legislature, as amended by Act 2012-491) which is described herein as "the Act".
2. Using the following definitions from Section 3 of the Act, select and initial either (a) or (b), below, to describe the Contractor/Grantee's business structure. **BUSINESS ENTITY.** Any person or group of persons employing one or more persons performing or engaging in any activity, enterprise, profession, or occupation for gain, benefit, advantage, or livelihood, whether for profit or not for profit. "Business entity" shall include, but not be limited to the following:
  - a) Self-employed individuals, business entities filing articles of incorporation, partnerships, limited partnerships, limited liability companies, foreign corporations, foreign limited partnerships, foreign limited liability companies authorized to transact business in this state, business trusts, and any business entity that registers with the Secretary of State.
  - b) Any business entity that possesses a business license, permit, certificate, approval, registration, charter, or similar form of authorization issued by the state, any business entity that is exempt by law from obtaining such a business license, and any business entity that is operating unlawfully without a business license.

**EMPLOYER.:** Any person, firm, corporation, partnership, joint stock association, agent, manager, representative, foreman, or other person having control or custody of any employment, place of employment, or of any employee, including any person or entity employing any person for hire within the State of Alabama, including a public employer.

This term shall not include the occupant of a household contracting with another person to perform casual domestic labor within the household.

\_\_\_\_ (a) The Contractor/Grantee is a business entity or employer as those terms are defined in Section 3 of the Act.

\_\_\_\_ (b) The Contractor/Grantee is not a business entity or employer as those terms are defined in Section 3 of the Act.

3. As of the date of this Certificate, Contractor/Grantee does not knowingly employ an unauthorized alien within the State of Alabama and hereafter it will not knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama;
4. Contractor/Grantee is enrolled in E-Verify unless it is not eligible to enroll because of the rules of that program or other factors beyond its control.

Certified this \_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

\_\_\_\_\_  
Name of Contractor/Grantee/Recipient

By: \_\_\_\_\_

Its: \_\_\_\_\_

The above Certification was signed in my presence by the person whose name appears above, on this \_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

WITNESS: \_\_\_\_\_ Printed name of Witness: \_\_\_\_\_

\_\_\_\_ initial  
**I have read and understand the contents of this page**



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**Page 6 of 9**

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**State of Alabama**  
**Disclosure Statement**  
(Required by Act 2001-955)

ENTITY COMPLETING FORM

Agreement Number

ADDRESS

CITY, STATE, ZIP

TELEPHONE NUMBER

( )

STATE AGENCY/DEPARTMENT THAT WILL RECEIVE GOODS, SERVICES, OR IS RESPONSIBLE FOR GRANT AWARD

ADDRESS

CITY, STATE, ZIP

TELEPHONE NUMBER

( )

This form is provided with:

☐ Contract

☐ Proposal

☐ Request for Proposal

☐ Invitation to Bid

☐ Grant Proposal

Have you or any of your partners, divisions, or any related business units previously performed work or provided goods to any State Agency/Department in the current or last fiscal year?

☐ Yes

☐ No

If yes, identify below the State Agency/Department that received the goods or services, the type(s) of good or services previously provided, and the amount received for the provision of such goods or services.

**Have you or any of your partners, divisions, or any related business units previously applied and received any grants from any State Agency/Department in the current or last fiscal year?**

☐ Yes

☐ No

If yes, identify the State Agency/Department that awarded the grant, the date such grant was awarded, and the amount of the grant.

1. List below the name(s) and address(es) of all public officials/public employees with whom you, members of your immediate family, or any of your employees have a family relationship and who may directly personally benefit financially from the proposed transaction. Identify the State Department/Agency for which the public officials/public employees work. (Attach additional sheets if necessary.)

2. List below the name(s) and address(es) of all family members of public officials/public employees with whom you, members of your immediate family, or any of your employees have a family relationship and who may directly personally benefit financially from

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**Page 7 of 9**

the proposed transaction. Identify the public officials/public employees and State Department/Agency for which the public officials/public employees work. (Attach additional sheets if necessary.)

If you identified individuals in items one and/or two above, describe in detail below the direct financial benefit to be gained by the public officials, public employees, and/or their family members as the result of the contract, proposal, request for proposal, invitation to bid, or grant proposal. (Attach additional sheets if necessary.)

Describe in detail below any indirect financial benefits to be gained by any public official, public employee, and/or family members of the public official or public employee as the result of the contract, proposal, request for proposal, invitation to bid, or grant proposal. (Attach additional sheets if necessary.)

List below the name(s) and address(es) of all paid consultants and/or lobbyists utilized to obtain the contract, proposal, request for proposal, invitation to bid, or grant proposal:

By signing below, I certify under oath and penalty of perjury that all statements on or attached to this form are true and correct to the best of my knowledge. I further understand that a civil penalty of ten percent (10%) of the amount of the transaction, not to exceed \$10,000.00, is applied for knowingly providing incorrect or misleading information.

Signature

Date

Notary's Signature

Date

Date Notary Expires

*Act 2001-995 requires the disclosure statement to be completed and filed with all proposals, bids, contracts, or grant proposals to the State of Alabama in excess of \$5,000.*

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I have read and understand the contents of this page



**Bid No. 2021-10 For: Mechatronics Workstation**

**Page 8 of 9**

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This form must be completed and returned before any contract(s) will be issued by the University of North Alabama

**REQUIREMENTS/ SPECIFICATIONS**

The University of North Alabama Department of Engineering Technology is seeking bids for the supply of a comprehensive mechatronics workstation as defined herein. It is the intent of the University to purchase one new workstation within 30 days of bid award as a result of this bid. Only new equipment will be considered with appropriate warranty. Any manufacturer specific information is meant to establish quality standards and minimum functional requirements; any bidder proposing an alternate specification must clearly identify any and all discrepancies and provide sufficient documentation within the bid response to enable the University to determine if the item is acceptable for the purpose for which it is intended. The award will be based upon the best overall fit, function, quality, delivery, and price. This equipment is to be used for the purpose of instruction and the University reserves the right to reject any item that it deems unsuitable for its intended use.

**The Total Price noted on the bid is to reflect a delivered product, fully functional with any and all components necessary for full operation of equipment. No assumptions should be required of the University.**

Upon bid award the University will provide a purchase order to authorize final order and expenditure.

Bidder to include with Bid submission:

- Complete bid document with all appropriate signatures;
- Fully itemized quote on company letterhead;
- If any alternative details are necessary: bidder to include detailed explanation of equivalence or superiority;
- Delivery commitment after receipt of order (delivery is critical to ensure timely training and use for Spring Classes)
- Warranty Details

**Specifications:**

A comprehensive mechatronics workstation using Allen Bradley PLC (Programmable Logic Controller) for process control and include the following mechanisms and corresponding functions:

1. A mechanism to supply/provide objects in a sequence for the pick-and-place-arm with gripper to pick up the objects.
2. A pick-and-place-arm with gripper to pick objects and place it on a conveyor belt mechanism.
3. Sensors will identify the type of material of the objects placed by the pick-and-place-arm whether they are plastic or metal, and the color of the object as well.
4. Once the material type and color are determined, the control system will move the conveyor belt and a mechanism will sort the object into different groups.
5. Minimum of three (more acceptable) separate bins or slides should be provided for three possible cases of object types, for example, a white colored plastic object is diverted/pushed into one bin or a slide, while a metal object is diverted/pushed into another bin or slide, and while a black colored plastic or metal object is diverted/pushed into another bin or a slide.
6. Sensors also should verify that all workpieces have been sorted and placed in the respective groups.

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**I have read and understand the contents of this page**



**Bid No. 2021-10 For: Mechatronics Workstation**

**Page 9 of 9**

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7. The vendor will provide at least ten different objects (which will have the characteristics as mentioned above) as part of the workstation package.
  8. The workstation should feature an emergency stop mechanism, along with the system start/stop switches.
  9. The Allen Bradley PLC used for the process control should be such that it is interfaceable and programmable using a software that is available free-of-charge such as Connected Components Workbench software by Rockwell Automation or other similar software.
  10. The workstation should be mounted on a base and with provisions for easy movement between different lab rooms.
  11. The wiring between the motors, sensors, conveyor system, pick-and-place-arm gripper all should be clearly visible for students to clearly understand and follow the wiring.
  12. As this workstation is intended for educational purposes and will be used to teach PLC programming along with interfacing between PLC and related hardware, the workstation will have enough space between the different components such that it is accessible for students to remove the components as needed and integrate them back with the workstation.
  13. The PLC and the I/O components should be selected such that there is provision for expansion in the future, to add at least two or more other input devices and two or more output devices into the workstation.
  14. The vendor will provide a PLC based logic ladder diagram program to operate the system and a very descriptive manual and troubleshooting information, along with all data regarding the components used in the system.

**QUOTE SHEET:**

**Item: Comprehensive Mechatronics Workstation with AB PLC**      **Total Price: \$**\_\_\_\_\_

**Delivery Commitment after receipt of order:** \_\_\_\_\_

**Note:** *fully itemized vendor quote to be attached, along with warranty information*

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**FOB UNIVERSITY OF NORTH ALABAMA, FLORENCE, AL 35632-0001**

For any questions regarding use or needed performance of this equipment

Contact Dr. Ravi Gollapalli (256)765-4857; email [rgollapalli@una.edu](mailto:rgollapalli@una.edu)

For questions regarding bid submission

Contact the Office of Procurement, Cindy Conlon (256)765-4293; email [chconlon@una.edu](mailto:chconlon@una.edu)

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