

TIPS VENDOR AGREEMENT

Between Advanced Technologies Consultants and
(Company Name)

THE INTERLOCAL PURCHASING SYSTEM (TIPS),
a Department of Texas Education Service Center Region 8 for
TIPS RFP 210902 Classroom and Teaching Aids Goods and Services

General Information

The Vendor Agreement ("Agreement") made and entered into by and between The Interlocal Purchasing System (hereinafter "TIPS") a government cooperative purchasing program authorized by the Region 8 Education Service Center, having its principal place of business at 4845 US Hwy 271 North, Pittsburg, Texas 75686 and the TIPS Vendor. This Agreement consists of the provisions set forth below, including provisions of all attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any attachment, the provisions set forth shall control unless otherwise agreed by the parties in writing and by signature and date on the attachment.

A Purchase Order ("PO"), Agreement or Contract is the TIPS Member's approval providing the authority to proceed with the negotiated delivery order under the Agreement. Special terms and conditions as agreed between the Vendor and TIPS Member should be added as addendums to the Purchase Order, Agreement or Contract. Items such as certificate of insurance, bonding requirements, small or disadvantaged business goals are some, but not all, of the possible addendums.

Terms and Conditions

Freight

All quotes to Members shall provide a line item for cost for freight or shipping regardless if there is a charge or not. If no charge for freight or shipping, indicate by stating "No Charge", "\$0", "included in price" or other similar indication. Otherwise, all shipping, freight or delivery charges shall be passed through to the TIPS Member at cost with no markup and said charges shall be agreed by the TIPS Member unless alternative shipping terms are agreed by TIPS as a result of the proposal award.

Warranty Conditions

All new supplies equipment and services shall include manufacturer's minimum standard warranty unless otherwise agreed to in writing. Vendor shall be legally permitted to sell all products offered for sale to TIPS Members if the offering is included in the Request for Proposal ("RFP") category. All goods proposed and sold shall be new unless clearly stated in writing.

Customer Support

The Vendor shall provide timely and accurate customer support for orders to TIPS Members as agreed by the Parties. Vendors shall respond to such requests within a commercially reasonable time after receipt of the request. If support and/or training is a line item sold or packaged with a sale, support shall be as agreed with the TIPS Member.

Agreements

Agreements for purchase will normally be put into effect by means of a contract, agreement, or purchase order(s) executed by authorized agents of the TIPS Member participating government entities, but other means of placing an order may be used at the Member's discretion. Vendor accepts and understands that when a purchase order or similar purchase document is sent from a customer through TIPS to the Vendor, TIPS is recording the purchase and verifying whether the purchase is within the parameters of the TIPS Contract only. Vendor agrees that TIPS is not a legal party to the purchase order or similar purchase document and TIPS is not responsible for identifying fraud, mistakes, or misrepresentations for the specific order. Vendor agrees that any purchase order or similar purchase document issued from a customer to Vendor, even when processed through TIPS, constitutes a legal contract between the customer and Vendor only. A Vendor that accepts a purchase order or similar purchase document and fulfills an order, even when processed through TIPS, is representing that the vendor has carefully reviewed the purchase order or similar purchase document for legality, authenticity, and accuracy.

Tax exempt status

Most TIPS Members are tax exempt and the related laws and/or regulations of the controlling jurisdiction(s) of the TIPS Member shall apply.

Assignments of Agreements

No assignment of this Agreement may be made without the prior notification of TIPS. Written approval of TIPS shall not be unreasonably withheld. Payment for delivered goods and services can only be made to the awarded Vendor, Vendor designated reseller or vendor assigned company.

Disclosures

- Vendor and TIPS affirm that he/she, or any authorized employees or agents, has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with this Agreement.
- Vendor shall attach, in writing, a complete description of any and all relationships that might be considered a conflict of interest in doing business with the TIPS program.
- The Vendor affirms that, to the best of his/her knowledge, the offer has been arrived at independently, and is submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over other vendors in the award of this Agreement.

Term of Agreement and Renewals

The Agreement with TIPS is for approximately **three (3)** years with an option for renewal for an additional **one (1)** consecutive **year**. If TIPS offers the renewal extension year, the Vendor will be notified by email to the primary contact of the awarded Vendor and shall be deemed accepted by the Vendor unless the awarded Vendor notifies TIPS of its objection to the additional term. TIPS may or may not exercise the available extension(s) provided in the original solicitation beyond the base **three-year** term. Whether or not to offer the extension is at the sole discretion of TIPS.

“Start Date” for Term Calculation Purposes Only: Regardless of actual award/effective date of Contract, for Agreement “term” calculation purposes only, the Agreement “start date” is the last day of the month that Award Notifications are anticipated as published in the Solicitation

Example: *If the anticipated award date published in the Solicitation is May 22, 2020 but extended negotiations delay award until June 27, 2020 The end date of the resulting initial “three-year” term Agreement, (which is subject to an extension(s)) will still be May 31, 2023.*

“Termination Date”: The scheduled Agreement “termination date” shall be the last day of the month of the month of the Original Solicitation’s Anticipated Award Date plus **three years**.

Example: *If the original term is approximately three years, and the solicitation provides an anticipated award date of May 22, 2020, the expiration date of the original **three-year** term shall be May 31, 2023.*

Extensions: Any extensions of the original term shall begin on the next day after the day the original term expires.

Example Following the Previous Example: *If TIPS offers a one-year extension, the expiration of the extended term shall be May 31, 2024.*

TIPS may offer to extend Vendor Agreements to the fullest extent the original Solicitation permits.

Automatic Renewal Clauses Incorporated in Awarded Vendor Agreements with TIPS Members Resulting from the Solicitation and with the Vendor Named in this Agreement.

No Agreement for goods or services with a TIPS Member by the awarded vendor named in this Agreement that results from the solicitation award named in this Agreement, may incorporate an automatic renewal clause that exceeds month to month terms with which the TIPS Member must comply. All renewal terms incorporated in an Agreement by the vendor with the TIPS Member shall only be valid and enforceable when the vendor receives written confirmation by purchase order, executed Agreement or other written instruction issued by the TIPS Member for any renewal period. The purpose of this clause is to avoid a TIPS Member inadvertently renewing an Agreement during a period in which the governing body of the TIPS Member has not properly appropriated and budgeted the funds to satisfy the Agreement renewal. This term is not negotiable and any Agreement between a TIPS Member and a TIPS awarded vendor with an automatic renewal clause that conflicts with these terms is rendered void and unenforceable.

Shipments

The Vendor shall ship, deliver or provide ordered products or services within a commercially reasonable time after the receipt of the order from the TIPS Member. If a delay in said delivery is anticipated, the Vendor shall notify TIPS Member as to why delivery is delayed and shall provide an estimated time for completion of the order. TIPS or the requesting entity may cancel the order if estimated delivery time is not acceptable or not as agreed by the parties.

Invoices

Each invoice or pay request shall include the TIPS Member’s purchase order number or other identifying designation as provided in the order by the TIPS Member. If applicable, the shipment tracking number or pertinent information for verification of TIPS Member receipt shall be made available upon request.

Payments

The TIPS Member will make payments directly to the Vendor, the Vendor Assigned Dealer or as agreed by the Vendor and the TIPS Member after receiving invoice and in compliance with applicable payment statute(s), whichever is the greater time or as otherwise provided by an agreement of the parties.

Pricing

Price increases will be honored according to the terms of the solicitation. All pricing submitted to TIPS shall include the participation fee, as provided in the solicitation, to be remitted to TIPS by the Vendor. Vendor will not show adding the fee to the invoice presented to TIPS Member customer.

Participation Fees and Reporting of Sales to TIPS by Vendor

The Participation Fee that was published as part of the Solicitation and the fee published is the legally effective fee, along with any fee conditions stated in the Solicitation. Collection of the fees by TIPS is required under Texas Government Code §791.011 Et seq. Fees are due on all TIPS purchases reported by either Vendor or Member. Fees are due to TIPS upon payment by the Member to the Vendor, Reseller or Vendor Assigned Dealer. Vendor, Reseller or Vendor Assigned Dealer agrees that the participation fee is due to TIPS for all Agreement sales immediately upon receipt of payment including partial payment, from the Member Entity and must be paid to TIPS at least on a monthly basis, specifically within 31 calendar days of receipt of payment, if not more frequently, or as otherwise agreed by TIPS in writing and signed by an authorized signatory of TIPS. Thus, when an awarded Vendor, Reseller or Vendor Assigned Dealer receives any amount of payment, even partial payment, for a TIPS sale, the legally effective fee for that amount is immediately due to TIPS from the Vendor and fees due to TIPS should be paid at least on a monthly basis, specifically within 31 calendar days of receipt of payment, if not more frequently.

Reporting of Sales to TIPS by Vendor

Vendor is required to report all sales under the TIPS contract to TIPS. When a public entity initiates a purchase with a TIPS Awarded Vendor, if the Member inquires verbally or in writing whether the Vendor holds a TIPS Contract, it is the duty of the Vendor to verify whether or not the Member is seeking a TIPS purchase. Once verified, the Vendor must include the TIPS Contract number on any communications and related sales documents exchanged with the TIPS Member entity. To report sales, the Vendor must login to the TIPS Vendor Portal online at https://www.tips-usa.com/vendors_form.cfm and click on the PO's and Payments tab. Pages 3-7 of the [Vendor Portal User Guide](#) will walk you through the process of reporting sales to TIPS. Please refer to the TIPS [Accounting FAQ's](#) for more information about reporting sales and if you have further questions, contact the Accounting Team at accounting@tips-usa.com. The Vendor or vendor assigned dealers are responsible for keeping record of all sales that go through the TIPS Agreement and submitting same to TIPS. Failure to render the participation fee to TIPS shall constitute a breach of this agreement with our parent governmental entity, Texas Education Service Center Region 8, as established by the Texas legislature and shall be grounds for termination of this agreement and any other agreement held with TIPS and possible legal action. Any overpayment of participation fees to TIPS by a Vendor will be refunded to the Vendor within ninety (90) days of receipt of notification if TIPS receives written notification of the overpayment not later than the expiration of six (6) months from the date of overpayment and TIPS determines that the amount was not legally due to TIPS pursuant to this agreement and applicable law. It is the Vendor's responsibility to identify which sales are TIPS Agreement sales and pay the correct participation fee due for TIPS Agreement sales. Any notification of overpayment received by TIPS after the expiration of six (6) months from the date of overpayment will be non-refundable. Region 8 ESC and TIPS reserve the right to extend the six (6) month deadline to notify if approved by the Region 8 ESC Board of Directors. TIPS reserves all rights under the law to collect the fees due. Please contact TIPS at tips@tips-usa.com or call (866) 839-8477 if you have questions about paying fees.

Indemnity

The Vendor agrees to indemnify and hold harmless and defend TIPS, TIPS Member(s), officers and employees from and against all claims and suits by third parties for damages, injuries to persons (including death),

property damages, losses, and expenses including court costs and reasonable attorney's fees, arising out of, or resulting from, Vendor's performance under this Agreement, including all such causes of action based upon common, constitutional, or statutory law, or based in whole or in part, upon allegations of negligent or intentional acts on the part of the Vendor, its officers, employees, agents, subcontractors, licensees, or invitees. Parties found liable shall pay their proportionate share of damages as agreed by the parties or as ordered by a court of competent jurisdiction over the case. **NO LIMITATION OF LIABILITY FOR DAMAGES FOR PERSONAL INJURY OR PROPERTY DAMAGE ARE PERMITTED OR AGREED BY TIPS/ESC REGION 8.** Per Texas Education Code §44.032(f), and pursuant to its requirements only, reasonable Attorney's fees are recoverable by the prevailing party in any dispute resulting in litigation.

State of Texas Franchise Tax

By signature hereon, the Vendor hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171, Tax Code.

Miscellaneous

The Vendor acknowledges and agrees that continued participation in TIPS is subject to TIPS sole discretion and that any Vendor may be removed from the participation in the Program at any time with or without cause. Nothing in the Agreement or in any other communication between TIPS and the Vendor may be construed as a guarantee that TIPS or TIPS Members will submit any orders at any time. TIPS reserves the right to request additional proposals for items or services already on Agreement at any time.

Purchase Order Pricing/Product Deviation

If a deviation of pricing/product on a Purchase Order or contract modification occurs between the Vendor and the TIPS Member, TIPS must be notified within five (5) business days of receipt of change order.

Termination for Convenience of TIPS Agreement Only

TIPS reserves the right to terminate this agreement for cause or no cause for convenience with a thirty (30) days prior written notice. Termination for convenience is conditionally required under Federal Regulations 2 CFR part 200 if the customer is using federal funds for the procurement. All purchase orders presented to the Vendor, but not fulfilled by the Vendor, by a TIPS Member prior to the actual termination of this agreement shall be honored at the option of the TIPS Member. The awarded Vendor may terminate the agreement with ninety (90) days prior written notice to TIPS 4845 US Hwy North, Pittsburg, Texas 75686. The vendor will be paid for goods and services delivered prior to the termination provided that the goods and services were delivered in accordance with the terms and conditions of the terminated agreement. This termination clause does not affect the sales agreements executed by the Vendor and the TIPS Member customer pursuant to this agreement. TIPS Members may negotiate a termination for convenience clause that meets the needs of the transaction based on applicable factors, such as funding sources or other needs.

TIPS Member Purchasing Procedures

Usually, purchase orders or their equal are issued by participating TIPS Member to the awarded vendor and should indicate on the order that the purchase is per the applicable TIPS Agreement Number. Orders are typically emailed to TIPS at tipspo@tips-usa.com.

- Awarded Vendor delivers goods/services directly to the participating member.
- Awarded Vendor invoices the participating TIPS Member directly.
- Awarded Vendor receives payment directly from the participating member.
- Fees are due to TIPS upon payment by the Member to the Vendor. Vendor agrees to pay the participation fee to TIPS for all Agreement sales upon receipt of payment including partial payment, from

the Member Entity or as otherwise agreed by TIPS in writing and signed by an authorized signatory of TIPS.

Licenses

Awarded Vendor shall maintain, in current status, all federal, state and local licenses, bonds and permits required for the operation of the business conducted by awarded Vendor. Awarded Vendor shall remain reasonably fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of goods or services under the Agreement. TIPS and TIPS Members reserves the right to stop work and/or cancel an order or terminate this or any other sales Agreement of any awarded Vendor whose license(s) required for performance under this Agreement have expired, lapsed, are suspended or terminated subject to a 30-day cure period unless prohibited by applicable statute or regulation.

Novation

If awarded Vendor sells or transfers all assets, rights or the entire portion of the assets or rights required to perform this Agreement, a successor in interest must guarantee to perform all obligations under this Agreement. A simple change of name agreement will not change the Agreement obligations of awarded vendor. TIPS will consider Contract Assignments on a case by case basis. TIPS must be notified within five (5) business days of the transfer of assets or rights.

Site Requirements (*only when applicable to service or job*)

Cleanup: When performing work on site at a TIPS Member's property, awarded Vendor shall clean up and remove all debris and rubbish resulting from their work as required or directed by TIPS Member or as agreed by the parties. Upon completion of work, the premises shall be left in good repair and an orderly, neat, clean and unobstructed condition.

Preparation: Awarded Vendor shall not begin a project for which TIPS Member has not prepared the site, unless awarded Vendor does the preparation work at no cost, or until TIPS Member includes the cost of site preparation in a purchase order. Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.

Registered sex offender restrictions: For work to be performed at schools, awarded Vendor agrees that no employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are, or reasonably expected to be, present unless otherwise agreed by the TIPS Member. Awarded Vendor agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the TIPS Member's discretion. Awarded Vendor must identify any additional costs associated with compliance of this term. If no costs are specified, compliance with this term will be provided at no additional charge. **Safety measures:** Awarded Vendor shall take all reasonable precautions for the safety of employees on the worksite, and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Awarded Vendor shall post warning signs against all hazards created by the operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

Safety Measures

Awarded Vendor shall take all reasonable precautions for the safety of employees on the worksite, and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Awarded vendor shall post warning signs against all hazards created by the operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

Smoking

Persons working under Agreement shall adhere to the TIPS Member's or local smoking statutes, codes or policies.

Marketing

Awarded Vendor agrees to allow TIPS to use their name and logo within TIPS website, marketing materials and advertisement subject to any reasonable restrictions provided to TIPS in the Proposal to the Solicitation. The Vendor may submit an acceptable use directive for Vendor's names and logos with which TIPS agrees to comply. Any use of TIPS name and logo or any form of publicity, inclusive of press release, regarding this Agreement by awarded vendor must have prior approval from TIPS which will not be unreasonably withheld. Request may be made by email to TIPS@TIPS-USA.COM.

Supplemental Agreements

The TIPS Member entity participating in the TIPS Agreement and awarded Vendor may enter into a separate Supplemental Agreement or contract to further define the level of service requirements over and above the minimum defined in this Agreement such as but not limited to, invoice requirements, ordering requirements, specialized delivery, etc. Any Supplemental Agreement or contract developed as a result of this Agreement is exclusively between the TIPS Member entity customer and the Vendor. TIPS, its agents, TIPS Members and employees not a party to the Supplemental Agreement with the TIPS Member customer, shall not be made party to any claim for breach of such agreement unless named and agreed by the Party in question in writing in the agreement. If a Vendor submitting a Proposal requires TIPS and/or TIPS Member to sign an additional agreement, those agreements shall comply with the award made by TIPS to the Vendor. Supplemental Vendor's Agreement documents may not become part of TIPS' Agreement with Vendor unless and until an authorized representative of TIPS reviews and approves it. TIPS review and approval may be at any time during the life of this Vendor Agreement. TIPS permits TIPS Members to negotiate additional terms and conditions with the Vendor for the provision of goods or services under the Vendor's TIPS Agreement so long as they do not materially conflict with this Agreement.

Survival Clause

All applicable sales, leases, Supplemental Agreements, contracts, software license agreements, warranties or service agreements that were entered into between Vendor and TIPS or the TIPS Member Customer under the terms and conditions of this Agreement shall survive the expiration or termination of this Agreement. All Orders, Purchase Orders issued or contracts executed by TIPS or a TIPS Member and accepted by the Vendor prior to the expiration or termination of this agreement, shall survive expiration or termination of the Agreement, subject to previously agreed terms and conditions agreed by the parties or as otherwise specified herein relating to termination of this agreement.

Legal obligations

It is the responding Vendor's responsibility to be aware of and comply with all local, state and federal laws governing the sale of products/services identified in the applicable Solicitation that resulted in this Vendor Agreement and any awarded Agreement thereof. Applicable laws and regulations must be followed even if not specifically identified herein.

Audit rights

Due to transparency statutes and public accountability requirements of TIPS and TIPS Members', the awarded Vendor shall, at their sole expense, maintain appropriate due diligence of all purchases made by TIPS Member that utilizes this Agreement. TIPS and Region 8 ESC each reserve the right to audit the accounting of TIPS related purchases for a period of three (3) years from the time such purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective

date of termination. In order to ensure and confirm compliance with this agreement, TIPS shall have authority to conduct audits of Awarded Vendor's pricing or TIPS transaction documentation with TIPS Members with 30 days' notice unless the audit is ordered by a Court Order or by a Government Agency with authority to do so without notice. Notwithstanding the foregoing, in the event that TIPS is made aware of any pricing being offered to eligible entities that is materially inconsistent with the pricing under this agreement, TIPS shall have the ability to conduct the audit internally or may engage a third- party auditing firm to investigate any possible non- compliant conduct or may terminate the Agreement according to the terms of this Agreement. In the event of an audit, the requested materials shall be reasonably provided in the time, format and at the location acceptable to Region 8 ESC or TIPS. TIPS agrees not to perform a random audit the TIPS transaction documentation more than once per calendar year, but reserves the right to audit for just cause or as required by any governmental agency or court with regulatory authority over TIPS or the TIPS Member.

Force Majeure

If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

Choice of Law

The Agreement between the Vendor and TIPS/ESC Region 8 and any addenda or other additions resulting from this procurement process, however described, shall be governed by, construed and enforced in accordance with the laws of the State of Texas, regardless of any conflict of laws principles.

Venue, Jurisdiction and Service of Process

Any Proceeding arising out of or relating to this procurement process or any contract issued by TIPS resulting from or any contemplated transaction shall be brought in a court of competent jurisdiction in Camp County, Texas and each of the parties irrevocably submits to the exclusive jurisdiction of said court in any such proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the Proceeding shall be heard and determined only in any such court, and agrees not to bring any proceeding arising out of or relating to this procurement process or any contract resulting from or any contemplated transaction in any other court. The parties agree that either or both of them may file a copy of this paragraph with any court as written evidence of the knowing, voluntary and freely bargained for agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Process in any Proceeding referred to in the first sentence of this Section may be served on any party anywhere in the world. Venue for any dispute resolution process, other than litigation, between TIPS and the Vendor shall be located in Camp or Titus County, Texas.

Project Delivery Order Procedures

The TIPS Member having approved and signed an interlocal agreement, or other TIPS Membership document, may make a request of the awarded Vendor under this Agreement when the TIPS Member desires goods or services awarded to the Vendor. Notification may occur via phone, the web, courier, email, fax, or in person. Upon notification of a pending request, the awarded Vendor shall acknowledge the TIPS Member's request as soon as possible, but must make contact with the TIPS Member within two working days.

Status of TIPS Members as Related to This Agreement

TIPS Members stand in the place of TIPS as related to this agreement and have the same access to the proposal information and all related documents. TIPS Members have all the same rights under the awarded Agreement as TIPS.

Vendor's Resellers as Related to This Agreement

Vendor's Named Resellers ("Resellers") under this Agreement shall comply with all terms and conditions of this agreement and all addenda or incorporated documents. All actions related to sales by Authorized Vendor's Resellers under this Agreement are the responsibility of the awarded Vendor. If Resellers fail to report sales to TIPS under your Agreement, the awarded Vendor is responsible for their contractual failures and shall be billed for the fees. The awarded Vendor may then recover the fees from their named reseller.

Support Requirements

If there is a dispute between the awarded Vendor and TIPS Member, TIPS or its representatives may, at TIPS sole discretion, assist in conflict resolution if requested by either party. TIPS, or its representatives, reserves the right to inspect any project and audit the awarded Vendor's TIPS project files, documentation and correspondence related to the requesting TIPS Member's order. If there are confidentiality requirements by either party, TIPS shall comply to the extent permitted by law.

Incorporation of Solicitation

The TIPS Solicitation which resulted in this Vendor Agreement, whether a Request for Proposals, the Request for Competitive Sealed Proposals or Request for Qualifications solicitation, or other, the Vendor's response to same and all associated documents and forms made part of the solicitation process, including any addenda, are hereby incorporated by reference into this Agreement as if copied verbatim.

SECTION HEADERS OR TITLES

THE SECTION HEADERS OR TITLES WITHIN THIS DOCUMENT ARE MERELY GUIDES FOR CONVENIENCE AND ARE NOT FOR CLASSIFICATION OR LIMITING OF THE RESPONSIBILITIES OF THE PARTIES TO THIS DOCUMENT.

STATUTORY REQUIREMENTS

Texas governmental entities are prohibited from doing business with companies that fail to certify to this condition as required by Texas Government Code Sec. 2270.

By executing this agreement, you certify that you are authorized to bind the undersigned Vendor and that your company (1) does not boycott Israel; and (2) will not boycott Israel during the term of the Agreement.

You certify that your company is not listed on and does not and will not do business with companies that are on the Texas Comptroller of Public Accounts list of Designated Foreign Terrorists Organizations per Texas Gov't Code 2270.0153 found at <https://comptroller.texas.gov/purchasing/docs/foreign-terrorist.pdf>

You certify that if the certified statements above become untrue at any time during the life of this Agreement that the Vendor will notify TIPS within three (3) business day of the change by a letter on Vendor's letterhead from and signed by an authorized representative of the Vendor stating the non-compliance decision and the TIPS Agreement number and description at:

Attention: General Counsel

ESC Region 8/The Interlocal Purchasing System (TIPS)
4845 Highway 271 North
Pittsburg, TX,75686
And by an email sent to bids@tips-usa.com

Insurance Requirements

The undersigned Vendor agrees to maintain the below minimum insurance requirements for TIPS Contract Holders:

General Liability	\$1,000,000 each Occurrence/ Aggregate
Automobile Liability	\$300,000 Includes owned, hired & non-owned
Workers' Compensation	Statutory limits for the jurisdiction in which the Vendor performs under this Agreement.
Umbrella Liability	\$1,000,000

When the Vendor or its subcontractors are liable for any damages or claims, the Vendor's policy, when the Vendor is responsible for the claim, must be primary over any other valid and collectible insurance carried by the Member. Any immunity available to TIPS or TIPS Members shall not be used as a defense by the contractor's insurance policy. The coverages and limits are to be considered minimum requirements and in no way limit the liability of the Vendor(s). Insurance shall be written by a carrier with an A-; VII or better rating in accordance with current A.M. Best Key Rating Guide. Only deductibles applicable to property damage are acceptable, unless proof of retention funds to cover said deductibles is provided. "Claims made" policies will not be accepted. Vendor's required minimum coverage shall not be suspended, voided, cancelled, non-renewed or reduced in coverage or in limits unless replaced by a policy that provides the minimum required coverage except after thirty (30) days prior written notice by certified mail, return receipt requested has been given to TIPS or the TIPS Member if a project or pending delivery of an order is ongoing. Upon request, certified copies of all insurance policies shall be furnished to the TIPS or the TIPS Member.

Special Terms and Conditions

- **Orders:** All Vendor orders received from TIPS Members must be emailed to TIPS at tips@tips-usa.com. Should a TIPS Member send an order directly to the Vendor, it is the Vendor's responsibility to forward a copy of the order to TIPS at the email above within 3 business days and confirm its receipt with TIPS.
- **Vendor Encouraging Members to bypass TIPS agreement:** Encouraging TIPS Members to purchase directly from the Vendor or through another agreement, when the Member has requested using the TIPS cooperative Agreement or price, and thereby bypassing the TIPS Agreement is a violation of the terms and conditions of this Agreement and will result in removal of the Vendor from the TIPS Program.
- **Order Confirmation:** All TIPS Member Agreement orders are approved daily by TIPS and sent to the Vendor. The Vendor should confirm receipt of orders to the TIPS Member (customer) within 3 business days.
- **Vendor custom website for TIPS:** If Vendor is hosting a custom TIPS website, updated pricing when effective. TIPS shall be notified when prices change in accordance with the award.
- **Back Ordered Products:** If product is not expected to ship within the time provided to the TIPS

Member by the Vendor, the Member is to be notified within 3 business days and appropriate action taken based on customer request.

The TIPS Vendor Agreement Signature Page is inserted here.

TIPS Vendor Agreement Signature Form

RFP 210902 Classroom and Teaching Aids Goods and Services

Company Name Advanced Technologies Consultants

Address 110 West Main St.

City Northville State MI Zip 48167

Phone 800-348-8447 Fax (248) 348-3040

Email of Authorized Representative tclose@atctrain.com

Name of Authorized Representative Thomas S. Close

Title President

Signature of Authorized Representative 

Date 10/14/2021

TIPS Authorized Representative Name David Fitts

Title Executive Director

TIPS Authorized Representative Signature 

Approved by ESC Region 8 

Date 11-18-2021

NOTICE TO MEMBERS REGARDING ATTRIBUTE RESPONSES

TIPS VENDORS RESPOND TO ATTRIBUTE QUESTIONS AS PART OF TIPS COMPETITIVE SOLICITATION PROCESS. THE VENDOR'S RESPONSES TO ATTRIBUTE QUESTIONS ARE INCLUDED HEREIN AS "SUPPLIER RESPONSE." PLEASE BE ADVISED THAT DEVIATIONS, IF ANY, IN VENDOR'S RESPONSE TO ATTRIBUTE QUESTIONS MAY NOT REFLECT VENDOR'S FINAL ATTRIBUTE RESPONSE, WHICH IS SUBJECT TO NEGOTIATIONS PRIOR TO AWARD. PLEASE CONTACT THE TIPS OFFICE AT 866-839-8477 WITH QUESTIONS OR CONCERNS REGARDING VENDOR ATTRIBUTE RESPONSE DEVIATIONS. PLEASE KEEP IN MIND THAT TIPS DOES NOT PROVIDE LEGAL COUNSEL TO MEMBERS. TIPS RECOMMENDS THAT YOU CONSULT YOUR LEGAL COUNSEL WHEN EXECUTING CONTRACTS WITH OR MAKING PURCHASES FROM TIPS VENDORS.



210902 Addendum 2

Advanced Technologies Consultants Supplier Response

Event Information

Number: 210902 Addendum 2
Title: Classroom and Teaching Aids Goods and Services
Type: Request for Proposal
Issue Date: 9/2/2021
Deadline: 10/19/2021 03:00 PM (CT)

Notes: **IF YOU ALREADY HAVE A CONTRACT that allows you to sell all of your offerings, there is NO NEED to respond to this RFP.**
You may respond regardless of the number of contracts you hold, but sometimes it can create conflicts for you with customers as to which contract to utilize.

Those titles could include:
Classroom and Teaching Aids
Academic Curriculum and Instructional Materials
Curriculum and Educational Materials
Science Equipment and Supplies
or other applicable titles for your offerings.

Contact Information

Address: Region 8 Education Service Center
4845 US Highway 271 North
Pittsburg, TX 75686
Phone: +1 (866) 839-8477

Email: bids@tips-usa.com

Advanced Technologies Consultants Information

Address: 110 West Main Street
Northville, MI 48167
Phone: (800) 348-8447
Fax: (248) 348-3040
Toll Free: (214) 842-9016

By submitting your response, you certify that you are authorized to represent and bind your company.

Thomas S. Close

Signature

Submitted at 10/19/2021 1:22:16 PM

tclose@atctrain.com

Email

Requested Attachments

Agreement Signature Form

Vendor Agreement Signature, TIPS 210902 - AdvTechConsult.pdf

If you have not taken exception or deviation to the agreement language in the solicitation attributes, download the AGREEMENT SIGNATURE FORM from the "ATTACHMENTS" tab. This PDF document is a fillable form. Download the document to your computer, fill in the requested company information, print the file, SIGN the form, SCAN the completed and signed AGREEMENT SIGNATURE FORM, and upload here.

If you have taken exception to any of the agreement language and noted the exception in the deviations section of the attributes for the agreement, complete the AGREEMENT SIGNATURE FORM, but DO NOT SIGN until those deviations have been negotiated and resolved with TIPS management. Upload the unsigned form here, because this is a required document.

All Other Certificates

No response

All Other Certificates (if applicable) must be scanned and uploaded. If vendor has more than one other certification scan into one document. (PDF Format ONLY)
DO NOT UPLOAD encrypted or password protected files.

Pricing Form 2

210902 Pricing Form 2, TIPS 210902 - AdvTechConsult.xlsx

The vendor must download the PRICING SPREADSHEET SHEET from the attachment tab, fill in the requested information and upload the completed spreadsheet.
DO NOT UPLOAD encrypted or password protected files.

Reference Form

References, TIPS 210902 - AdvTechConsult.pdf

The vendor must download the References spreadsheet from the attachment tab, fill in the requested information and upload the completed spreadsheet. DO NOT UPLOAD encrypted or password protected files.

Conflict of Interest Form CIQ- ONLY REQUIRED IF A CONFLICT EXISTS PER THE INSTRUCTIONS

No response

ONLY REQUIRED IF A CONFLICT EXISTS PER THE INSTRUCTIONS

Conflict of Interest Form for Vendors that are required to submit the form. The Conflict of Interest Form is included in the Base documents or can be found at <https://www.tips-usa.com/assets/documents/docs/CIQ.pdf>.

Proposed Goods and Services

ATC Texas Product Guide 6-17-2021.pdf

Please upload one or more documents or sheets describing your offerings, line cards, catalogs, links to offerings OR list links to your offerings that illustrate the catalog of proposed lines of goods and or services you carry and offer under this proposal. It does not have to be exhaustive but should, at a minimum tell us what you are offering. It could be as simple as a sheet with your link to your online catalog of goods and services.

D/M/WBE Certification OPTIONAL

No response

D/M/WBE Certification documentation may be scanned and uploaded if you desire to claim your status as one of the identified enterprises. (Disadvantaged Business Enterprise, Minority Business Enterprise and/or Woman Business Enterprise) If vendor has more than one certification scan into one document. (PDF Format ONLY)
DO NOT UPLOAD encrypted or password protected files.

Warranty

No response

Warranty information (if applicable) must be scanned and uploaded. (PDF Format ONLY)
DO NOT UPLOAD encrypted or password protected files.

Vendor Agreement

Vendor Agreement, TIPS 210902 - AdvTechConsult.pdf

The vendor must download the Vendor Agreement from the attachment tab, fill in the requested information and upload the completed agreement.
DO NOT UPLOAD encrypted or password protected files.

Pricing Form 1

210902 Pricing Form 1, TIPS 210902 - AdvTechConsult.xlsx

The vendor must download the PRICING SPREADSHEET SHEET from the attachment tab, fill in the requested information and upload the completed spreadsheet.
DO NOT UPLOAD encrypted or password protected files.

Supplementary

No response

Supplementary information may be scanned and uploaded. (Company information, brochures, catalogs, etc.) (PDF Format ONLY)
DO NOT UPLOAD encrypted or password protected files.

Logo and Other Company Marks

Logo, TIPS 210902 - AdvTechConsult.gif

If you desire, please upload your company logo to be added to your individual profile page on the TIPS website. If any particular specifications are required for use of your company logo, please upload that information under the Supplementary section or another non-required section under the "Response Attachment" tab. Preferred Logo Format: 300 x 225 px - .png, .eps, .jpeg preferred

Certification of Corporate Offerer Form- COMPLETE ONLY IF OFFERER IS A CORPORATION

Certification by Corporate Officer, TIPS 210902 - AdvTechConsult.pdf

COMPLETE AND UPLOAD FORM IN ATTACHMENTS SECTION ONLY IF OFFERER IS A CORPORATION

Disclosure of Lobbying Activities Standard Form LLL

No response

ONLY IF you answered "I HAVE Lobbied per above" to attribute #66, please download and complete and upload the Standard Form-LLL, "disclosure Form to Report Lobbying," in the Response attachments section.

Confidentiality Claim Form

Confidential Info Status Form, TIPS 210902 - AdvTechConsult.pdf

REQUIRED CONFIDENTIALITY FORM. Complete the form according to your company requirements, make any desired attachments and upload to the appropriate section under "Response Attachments" THIS FORM DETERMINES HOW ESC8/TIPS RESPONDS TO LEGAL PUBLIC INFORMATION REQUESTS.

Current W-9 Tax Form

W-9, TIPS 210902 - AdvTechConsult.pdf

You are required by TIPS to upload a current W-9 Internal Revenue Service (IRS) Tax Form for your entity. This form will be utilized by TIPS to properly identify your entity.

Bid Attributes

1	<p>Yes - No</p> <p>Disadvantaged/Minority/Women Business Enterprise - D/M/WBE/Federal HUBZone (Required by some participating governmental entities). Vendor certifies that their firm is a D/M/WBE or HUBZone? Vendor must upload proof of certification to the "Response Attachments" D/M/WBE CERTIFICATES section.</p> <p><input type="text" value="NO"/></p>
----------	---

2 Yes - No
Historically Underutilized Business - HUB (Required by some participating governmental entities) Vendor certifies that their firm is a HUB as defined by the State of Texas at <https://comptroller.texas.gov/purchasing/vendor/hub/>.
Proof may be submitted. Vendor must upload proof of certification to the "Response Attachments" HUB CERTIFICATES section.

3 Yes - No
The Vendor can provide services and/or products to all 50 US States?

4 States Served:
If answer is NO to question #3, please list which states can be served. (Example: AR, OK, TX)

5 Company and/or Product Description:
This information will appear on the TIPS website in the company profile section, if awarded a TIPS contract. (Limit 750 characters.)

6 Primary Contact Name
Primary Contact Name

7 Primary Contact Title
Primary Contact Title

8 Primary Contact Email
Primary Contact Email

9 Primary Contact Phone
Enter 10 digit phone number. (No dashes or extensions)
Example: 8668398477

10 Primary Contact Fax
Enter 10 digit phone number. (No dashes or extensions)
Example: 8668398477

1 1	Primary Contact Mobile Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="No response"/>
----------------------	--

1 2	Secondary Contact Name Secondary Contact Name <input type="text" value="Christine Lollar"/>
----------------------	--

1 3	Secondary Contact Title Secondary Contact Title <input type="text" value="Sales Support Specialist"/>
----------------------	--

1 4	Secondary Contact Email Secondary Contact Email <input type="text" value="clollar@atctrain.com"/>
----------------------	--

1 5	Secondary Contact Phone Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="8003488447"/>
----------------------	--

1 6	Secondary Contact Fax Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="2483483040"/>
----------------------	--

1 7	Secondary Contact Mobile Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="No response"/>
----------------------	--

1 8	Admin Fee Contact Name Admin Fee Contact Name. This person is responsible for paying the admin fee to TIPS. <input type="text" value="Lisa Hunter"/>
----------------------	---

1 9	Admin Fee Contact Email Admin Fee Contact Email <input type="text" value="lhunter@atctrain.com"/>
----------------------	--

2 0	Admin Fee Contact Phone Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="8003488447"/>
----------------------	--

2 1	Purchase Order Contact Name Purchase Order Contact Name. This person is responsible for receiving Purchase Orders from TIPS. <input type="text" value="Lisa Hunter"/>
----------------------	--

2 2	Purchase Order Contact Email Purchase Order Contact Email <input type="text" value="lhunter@atctrain.com"/>
2 3	Purchase Order Contact Phone Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="8003488447"/>
2 4	Company Website Company Website (Format - www.company.com) <input type="text" value="www.atctrain.com"/>
2 5	Entity D/B/A's and Assumed Names Please identify all of your entity's assumed names and D/B/A's. Please note that you will be identified publicly by the legal name under which you responded to this solicitation unless you organize otherwise with TIPS after award. <input type="text" value="T.S. Enterprise Associates, Inc. dba Advanced Technologies Consultants"/>
2 6	Primary Address Primary Address <input type="text" value="110 West Main St."/>
2 7	Primary Address City Primary Address City <input type="text" value="Northville"/>
2 8	Primary Address State Primary Address State (2 Digit Abbreviation) <input type="text" value="MI"/>
2 9	Primary Address Zip Primary Address Zip <input type="text" value="48167"/>
3 0	Search Words: Please list search words to be posted in the TIPS database about your company that TIPS website users might search. Words may be product names, manufacturers, or other words associated with the category of award. YOU MAY NOT LIST NON-CATEGORY ITEMS. (Limit 500 words) (Format: product, paper, construction, manufacturer name, etc.) <input type="text" value="Festo-Didactic, Universal Robots, technical training equipment, CTE, Advanced Manufacturing, Alternative Energy, Automation, CNC, Electricity/Electronics, Electric Power/Controls, Fluid Power, Lab Furniture, HVAC, Industrial Maintenance, Process Control, Mechatronics, STEM, Workforce, Career Technical Training"/>

**3
1** Do you want TIPS Members to be able to spend Federal grant funds with you if awarded? Is it your intent to be able to sell to our members regardless of the fund source, whether it be local, state or federal?

Most of our members receive Federal Government grants or other funding and they make up a significant portion of their budgets. The Members need to know if your company is willing to sell to them when they spend federal budget funds on their purchase. There are attributes that follow that include provisions from the federal regulations in 2 CFR part 200, etc. Your answers will determine if your award will be designated as eligible for TIPS Members to utilize federal funds with your company.

Do you want TIPS Members to be able to spend Federal funds, at the Member's discretion, with you?

**3
2** Yes - No

Certification of Residency (Required by the State of Texas) The vendor's ultimate parent company or majority owner:

(A) has its principal place of business in Texas;

OR

(B) employs at least 500 persons in Texas?

This question is required as a data gathering function for information to our members making purchases with awarded vendors. It does not affect scoring with TIPS.

**3
3** Company Residence (City)

Vendor's principal place of business is in the city of?

**3
4** Company Residence (State)

Vendor's principal place of business is in the state of?

35 Discount Offered - CAUTION READ CAREFULLY BECAUSE VENDORS FREQUENTLY MAKE MISTAKES ON THIS ATTRIBUTE QUESTION

Remember this is a **MINIMUM** discount percentage. So, be sure that the discount percentage inserted here can be applied to ANY OFFERING OF GOODS OR SERVICES THROUGHOUT THE LIFE OF THE CONTRACT.

CAUTION: BE CERTAIN YOU CAN HONOR THIS **MINIMUM** DISCOUNT PERCENTAGE ON ANY OFFERED SERVICE OR GOOD NOW OR DURING THE LIFE OF THE CONTRACT.

What is the **MINIMUM** percentage discount off of any item or service you offer to TIPS Members that is in your regular catalog (as defined in the solicitation specifications document), website, store or shelf pricing or when adding new goods or services to your offerings during the life of the contract? The resulting price of any goods or services Catalog list prices after this discount is applied is a ceiling on your pricing and not a floor because, in order to be more competitive in the individual circumstance, you may offer a larger discount depending on the items or services purchased and the quantity at time of sale. Please note that any specific greater discount offered for a particular product, brand, or service listed in Vendor's proposal will control and Vendor will be required to honor that greater specific discount, in excess of the minimum discount, for that particular product, brand, or service for the life of the contract.

Must answer with a number between 0% and 100%.

36 MINIMUM Discount Term

Does the vendor agree to at least offer, for the life of the Agreement, the Minimum Discount Percentage off list or catalog proposed by Vendor in response to the Attribute entitled "Discount Offered - CAUTION READ CAREFULLY BECAUSE VENDORS FREQUENTLY MAKE MISTAKES ON THIS ATTRIBUTE QUESTION"? TIPS will utilize this response to satisfy the Long Term Cost scoring evaluation criteria. A "YES" answer will be awarded the maximum 10 points for this criterion out of the 100 total points and a "NO" answer is awarded 0 points.

37 Catalog or list pricing of vendor

For the duration of the Contract, Vendor agrees to provide catalog pricing, as defined in the solicitation and below, to TIPS upon request for any goods and services offered on the Vendor's TIPS Contract.

"Catalog" means the available list of tangible personal property or services, in the most current listing, regardless of date, during the life of the contract, that takes the form of a catalog, price list, schedule, shelf price or other form that:

- A. is regularly maintained by the manufacturer or Vendor of an item; and
- B. is either published or otherwise available for inspection by a customer during the purchase process;
- C. to which the minimum discount proposed by the proposing Vendor may be applied.

38 TIPS Administration Fee

By submitting a proposal, I agree that all pricing submitted to TIPS shall include the Administration Fee, as designated in the solicitation or as otherwise agreed in writing which shall be remitted to TIPS by the Vendor, or the vendor's named resellers, and as agreed to in the Vendor Agreement. I agree that the fee shall not and will not be added by the Vendor as a separate line item on a TIPS member invoice, quote, proposal or any other written communications with the TIPS member.

3
9

Yes - No

Vendor agrees to remit to TIPS the required administration fee or, if resellers are named, Vendor agrees to guarantee the fee remittance by or for the reseller named by the vendor?

TIPS/ESC Region 8 is required by Texas Government Code § 791 to be compensated for its work and thus, failure to agree shall render your response void and it will not be considered.

4
0

Additional Discounts?

Do you offer additional discounts to TIPS members for large order quantities or large scope of work?

4
1

Years in Business as Proposing Company

Years in business as proposing company?

4
2

Resellers:

Does the vendor have resellers that it will name under this contract? Resellers are defined as other companies that sell your products under an agreement with you, the awarded vendor of TIPS.

EXAMPLE: BIGmart is a reseller of ACME brand televisions. If ACME were a TIPS awarded vendor, then ACME would list BIGmart as a reseller.

(If applicable, Vendor should add all Authorized Resellers within the TIPS Vendor Portal upon award).

4
3

Right of Refusal

The proposing vendor has the right not to sell under the awarded agreement with a TIPS member at vendor's discretion unless required by law.

4
4

NON-COLLUSIVE BIDDING CERTIFICATE

By submission of this bid or proposal, the Bidder certifies that:

- 1) This bid or proposal has been independently arrived at without collusion with any other Bidder or with any Competitor;
- 2) This bid or proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of bids, or proposals for this project, to any other Bidder, Competitor or potential competitor;
- 3) No attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal;
- 4) The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties being applicable to the Bidder as well as to the person signing in its behalf.

Not a negotiable term. Failure to agree will render your proposal non-responsive and it will not be considered.

4 5 CONFLICT OF INTEREST QUESTIONNAIRE - FORM CIQ - Do you have any CONFLICT OF INTEREST TO REPORT OR DISCLOSE under this statutory requirement?

Do you have any CONFLICT OF INTEREST TO REPORT OR DISCLOSE under this statutory requirement? YES or NO

If you have a conflict of interest as described in this form or the Local Government Code Chapter 176, cited therein- you are required to complete and file with TIPS. The Form CIQ is one of the attachments to this solicitation.

There is an optional upload for this form provided if you have a conflict and must file the form

4 6 Filing of Form CIQ

If yes (above), have you filed a form CIQ by uploading the form to this RFP as directed above?

4 7 Regulatory Standing

I certify to TIPS for the proposal attached that my company is in good standing with all governmental agencies Federal or state that regulate any part of our business operations. If not, please explain in the next attribute question.

4 8 Regulatory Standing

Regulatory Standing explanation of no answer on previous question.

4 9 Antitrust Certification Statements (Tex. Government Code § 2155.005)

By submission of this bid or proposal, the Bidder certifies that:

I affirm under penalty of perjury of the laws of the State of Texas that:

- (1) I am duly authorized to execute this contract on my own behalf or on behalf of the company, corporation, firm, partnership or individual (Company) listed below;
- (2) In connection with this bid, neither I nor any representative of the Company has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15;
- (3) In connection with this bid, neither I nor any representative of the Company has violated any federal antitrust law;
- (4) Neither I nor any representative of the Company has directly or indirectly communicated any of the contents of this bid to a competitor of the Company or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Company.

Suspension or Debarment Instructions

Instructions for Certification:

1. By answering yes to the next Attribute question below, the vendor and prospective lower tier participant is providing the certification set out herein in accordance with these instructions.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and / or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participants,” “person,” “primary covered transaction,” “principal,” “proposal” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this form that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction” without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and / or debarment.

Suspension or Debarment Certification

By answering yes, you certify that no federal suspension or debarment is in place, which would preclude receiving a federally funded contract as described above.

5
2

Non-Discrimination Statement and Certification

In accordance with Federal civil rights law, all U.S. Departments, including the U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

(Title VI of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975; Title 7 CFR Parts 15, 15a, and 15b; the Americans with Disabilities Act; and FNS Instruction 113-1, Civil Rights Compliance and Enforcement – Nutrition Programs and Activities)

All U.S. Departments, including the USDA are equal opportunity provider, employer, and lender.

Not a negotiable term. Failure to agree by answering YES will render your proposal non-responsive and it will not be considered. I certify that in the performance of a contract with TIPS or its members, that our company will conform to the foregoing anti-discrimination statement and comply with the cited and all other applicable laws and regulations.

Yes, I certify (Yes)

5
3

2 CFR PART 200 Contract Provisions Explanation

Required Federal contract provisions of Federal Regulations for Contracts for contracts with ESC Region 8 and TIPS Members:

The following provisions are required to be in place and agreed if the procurement is funded in any part with federal funds.

The ESC Region 8 and TIPS Members are the subgrantee or Subrecipient by definition. Most of the provisions are located in 2 CFR PART 200 - Appendix II to Part 200—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards at 2 CFR PART 200. Others are included within 2 CFR part 200 et al.

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

5 4 2 CFR PART 200 Contracts

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Notice: Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party.

Does vendor agree?

5 5 2 CFR PART 200 Termination

Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members reserves the right to terminate any agreement in excess of \$10,000 resulting from this procurement process for cause after giving the vendor an appropriate opportunity and up to 30 days, to cure the causal breach of terms and conditions. ESC Region 8 and TIPS Members reserves the right to terminate any agreement in excess of \$10,000 resulting from this procurement process for convenience with 30 days notice in writing to the awarded vendor. The vendor would be compensated for work performed and goods procured as of the termination date if for convenience of the ESC Region 8 and TIPS Members. Any award under this procurement process is not exclusive and the ESC Region 8 and TIPS reserves the right to purchase goods and services from other vendors when it is in the best interest of the ESC Region 8 and TIPS.

Does vendor agree?

5 6 2 CFR PART 200 Clean Air Act

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$250,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Pursuant to the Clean Air Act, et al above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members requires that the proposer certify that during the term of an award by the ESC Region 8 and TIPS Members resulting from this procurement process the vendor agrees to comply with all of the above regulations, including all of the terms listed and referenced therein.

Does vendor agree?

5
7

2 CFR PART 200 Byrd Anti-Lobbying Amendment

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members requires the proposer certify that during the term and during the life of any contract with ESC Region 8 and TIPS Members resulting from this procurement process the vendor certifies to the terms included or referenced herein.

Does vendor agree?

5
8

2 CFR PART 200 Federal Rule

Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$250,000)

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members requires the proposer certify that in performance of the contracts, subcontracts, and subgrants of amounts in excess of \$250,000, the vendor will be in compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15).

Does vendor certify that it is in compliance with the Clean Air Act?

5
9

2 CFR PART 200 Procurement of Recovered Materials

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Does vendor certify that it is in compliance with the Solid Waste Disposal Act as described above?

6 2 CFR PART 200 Rights to Inventions

If the Federal award meets the definition of “funding agreement” under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

Pursuant to the above, when the foregoing applies to ESC Region 8 and TIPS Members, Vendor certifies that during the term of an award resulting from this procurement process, Vendor agrees to comply with all applicable requirements as referenced in the Federal rule above.

Does vendor agree?

6 2 CFR PART 200 Domestic Preferences for Procurements

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award. For purposes of 2 CFR Part 200.322, “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. Moreover, for purposes of 2 CFR Part 200.322, “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum, plastics and polymer-based products such as polyvinyl chloride pipe, aggregates such as concrete, class, including optical fiber, and lumber.

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, Vendor certifies that to the greatest extent practicable Vendor will provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products).

Does vendor agree?

6 2 CFR PART 200 Ban on Foreign Telecommunications

Federal grant funds may not be used to purchase equipment, services, or systems that use “covered telecommunications” equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. “Covered telecommunications” means purchases from Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities), and video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, Vendor certifies that Vendor will not purchase equipment, services, or systems that use “covered telecommunications”, as defined by 2 CFR §200.216 equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

Does vendor agree?

6
3

Certification Regarding Lobbying

Applicable to Grants, Subgrants, Cooperative Agreements, and Contracts Exceeding \$100,000 in Federal Funds

Submission of this certification is a prerequisite for making or entering into this transaction and is imposed by section 1352, Title 31, U.S. Code. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all covered subawards exceeding \$100,000 in Federal funds at all appropriate tiers and that all subrecipients shall certify and disclose accordingly.

6
4

If you answered "I HAVE lobbied" to the above Attribute Question

If you answered "I HAVE lobbied" to the above Attribute question, you must download the Lobbying Report "Standard From LLL, disclosure Form to Report Lobbying" which includes instruction on completing the form, complete and submit it in the Response Attachments section as a report of the lobbying activities you performed or paid others to perform.

6
5

Subcontracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms.

Do you ever anticipate the possibility of subcontracting any of your work under this award if you are successful?

IF NO, DO NOT ANSWER THE NEXT ATTRIBUTE QUESTION. . IF YES, and ONLY IF YES, you must answer the next question YES if you want a TIPS Member to be authorized to spend Federal Grant Funds for Procurement.

6 6 ONLY IF YES TO THE PREVIOUS QUESTION OR if you ever do subcontract any part of your performance under the TIPS Agreement, do you agree to comply with the following federal requirements?

ONLY IF YES TO THE PREVIOUS QUESTION OR if you ever do subcontract any part of your performance under the TIPS Agreement,

do you agree to comply with the following federal requirements?

Federal Regulation 2 CFR §200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms. (a)The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce ; and

(6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs(1) through (5) of this section.

6 7 Indemnification

The ESC Region 8 and TIPS is a Texas Political Subdivision and a local governmental entity; therefore, is prohibited from

indemnifying third parties pursuant to the Texas Constitution (Article 3, Section 52) except as specifically provided by law or as

ordered by a court of competent jurisdiction. A provision in a contract to indemnify or hold a party harmless is a promise to pay for

any expenses the indemnified party incurs, if a specified event occurs, such as breaching the terms of the contract or negligently

performing duties under the contract. Article III, Section 49 of the Texas Constitution states that "no debt shall be created by or on

behalf of the State ... " The Attorney General has counseled that a contractually imposed obligation of indemnity creates a "debt" in

the constitutional sense. Tex. Att'y Gen. Op. No. MW-475 (1982). Contract clauses which require the System or institutions to

indemnify must be deleted or qualified with "to the extent permitted by the Constitution and Laws of the State of Texas." Liquidated

damages, attorney's fees, waiver of vendor's liability, and waiver of statutes of limitations clauses should also be deleted or qualified

with "to the extent permitted by the Constitution and laws of State of Texas."

Not a negotiable term. Failure to agree will render your proposal non-responsive and it will not be considered. Do you agree

to these terms?

Yes, I Agree (Yes)

**6
8 Remedies**

The parties shall be entitled to exercise any right or remedy available to it either at law or in equity, subject to the choice of law, venue and service of process clauses limitations agreed herein. Nothing in this agreement shall commit the TIPS to an arbitration resolution of any disagreement under any circumstances. Any Claim arising out of or related to the Contract, except for those specifically waived under the terms of the Contract, may, after denial of the Board of Directors, be subject to mediation at the request of either party. Any issues not resolved hereunder MAY be referred to non-binding mediation to be conducted by a mutually agreed upon mediator as a prerequisite to the filing of any lawsuit over such issue(s). The parties shall share the mediator's fee and any associated filing fee equally. Mediation shall be held in Camp or Titus County, Texas. Agreements reached in mediation shall be reduced to writing, and will be subject to the approval by the District's Board of Directors, signed by the Parties if approved by the Board of Directors, and, if signed, shall thereafter be enforceable as provided by the laws of the State of Texas.

Do you agree to these terms?

**6
9 Remedies Explanation of No Answer**

**7
0 Choice of Law**

The agreement between the Vendor and TIPS/ESC Region 8 and any addenda or other additions resulting from this procurement process, however described, shall be governed by, construed and enforced in accordance with the laws of the State of Texas, regardless of any conflict of laws principles. THIS DOES NOT APPLY to a vendor's agreement entered into with a TIPS Member, as the Member may be located outside Texas.

Do you agree to these terms?

**7
1 Venue, Jurisdiction and Service of Process**

Any proceeding, involving Region 8 ESC or TIPS, arising out of or relating to this procurement process or any contract issued by TIPS resulting from or any contemplated transaction shall be brought in a court of competent jurisdiction in Camp County, Texas and each of the parties irrevocably submits to the exclusive jurisdiction of said court in any such proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the Proceeding shall be heard and determined only in any such court, and agrees not to bring any proceeding arising out of or relating to this procurement process or any contract resulting from or any contemplated transaction in any other court. The parties agree that either or both of them may file a copy of this paragraph with any court as written evidence of the knowing, voluntary and freely bargained for agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Process in any Proceeding referred to in the first sentence of this Section may be served on any party anywhere in the world. Any dispute resolution process other than litigation shall have venue in Camp County or Titus County Texas.

Do you agree to these terms?

**7
2** **Infringement(s)**

The successful vendor will be expected to indemnify and hold harmless the TIPS and its employees, officers, agents, representatives, contractors, assignees and designees from any and all third party claims and judgments involving infringement of patent, copyright, trade secrets, trade or service marks, and any other intellectual or intangible property rights attributed to or claims based on the Vendor's proposal or Vendor's performance of contracts awarded and approved.

Do you agree to these terms?

Yes, I Agree

**7
3** **Infringement(s) Explanation of No Answer**

No response

**7
4** **Contract Governance**

Any contract made or entered into by the TIPS is subject to and is to be governed by Section 271.151 et seq, Tex Loc Gov't Code. Otherwise, TIPS does not waive its governmental immunities from suit or liability except to the extent expressly waived by other applicable laws in clear and unambiguous language.

Yes, I Agree (Yes)

**7
5** **Payment Terms and Funding Out Clause**

Payment Terms:

TIPS or TIPS Members shall not be liable for interest or late payment fees on past-due balances at a rate higher than permitted by the laws or regulations of the jurisdiction of the TIPS Member.

Funding Out Clause:

Vendor agrees to abide by the laws and regulations, including Texas Local Government Code § 271.903, or any statutory or regulatory limitations of the jurisdiction of any TIPS Member which governs contracts entered into by the Vendor and TIPS or a TIPS Member that requires all contracts approved by TIPS or a TIPS Member are subject to the budgeting and appropriation of currently available funds by the entity or its governing body.

See statute(s) for specifics or consult your legal counsel.

Not a negotiable term. Failure to agree will render your proposal non-responsive and it will not be considered.

Do you agree to these terms?

Yes, I Agree (Yes)

7 Insurance and Fingerprint Requirements Information

6 Insurance

If applicable and your staff will be on TIPS member premises for delivery, training or installation etc. and/or with an automobile, you must carry automobile insurance as required by law. You may be asked to provide proof of insurance.

Fingerprint

It is possible that a vendor may be subject to Chapter 22 of the Texas Education Code. The Texas Education Code, Chapter 22, Section 22.0834 & 22.08341. Statutory language may be found at: <http://www.statutes.legis.state.tx.us/>

If the vendor has staff that meet both of these criterion:

- (1) will have continuing duties related to the contracted services; and
- (2) has or will have direct contact with students

Then you have "covered" employees for purposes of completing the attached form.

TIPS recommends all vendors consult their legal counsel for guidance in compliance with this law. If you have questions on how to comply, see below. If you have questions on compliance with this code section, contact the Texas Department of Public Safety Non-Criminal Justice Unit, Access and Dissemination Bureau, FAST-FACT at NCJU@txdps.state.tx.us and you should send an email identifying you as a contractor to a Texas Independent School District or ESC Region 8 and TIPS. Texas DPS phone number is (512) 424-2474.

See form in the next attribute to complete entitled:
Texas Education Code Chapter 22 Contractor Certification for Contractor Employees

Texas Education Code Chapter 22 Contractor Certification for Contractor Employees

Introduction: Texas Education Code Chapter 22 requires entities that contract with school districts to provide services to obtain criminal history record information regarding covered employees. Contractors must certify to the district that they have complied. Covered employees with disqualifying criminal histories are prohibited from serving at a school district.

Definitions: Covered employees: Employees of a contractor or subcontractor who have or will have continuing duties related to the service to be performed at the District and have or will have direct contact with students. The District will be the final arbiter of what constitutes direct contact with students. Disqualifying criminal history: Any conviction or other criminal history information designated by the District, or one of the following offenses, if at the time of the offense, the victim was under 18 or enrolled in a public school:

(a) a felony offense under Title 5, Texas Penal Code; (b) an offense for which a defendant is required to register as a sex offender under Chapter 62, Texas Code of Criminal Procedure; or (c) an equivalent offense under federal law or the laws of another state.

I certify that:

NONE (Section A) of the employees of Contractor and any subcontractors are covered employees, as defined above. If this box is checked, I further certify that Contractor has taken precautions or imposed conditions to ensure that the employees of Contractor and any subcontractor will not become covered employees. Contractor will maintain these precautions or conditions throughout the time the contracted services are provided.

OR

SOME (Section B) or all of the employees of Contractor and any subcontractor are covered employees. If this box is checked, I further certify that:

(1) Contractor has obtained all required criminal history record information regarding its covered employees. None of the covered employees has a disqualifying criminal history.

(2) If Contractor receives information that a covered employee subsequently has a reported criminal history, Contractor will immediately remove the covered employee from contract duties and notify the District in writing within 3 business days.

(3) Upon request, Contractor will provide the District with the name and any other requested information of covered employees so that the District may obtain criminal history record information on the covered employees.

(4) If the District objects to the assignment of a covered employee on the basis of the covered employee's criminal history record information, Contractor agrees to discontinue using that covered employee to provide services at the District.

Noncompliance or misrepresentation regarding this certification may be grounds for contract termination.

None

7 **Texas Business and Commerce Code § 272 Requirements as of 9-1-2017**

8 SB 807 prohibits construction contracts to have provisions requiring the contract to be subject to the laws of another state, to be required to litigate the contract in another state, or to require arbitration in another state. A contract with such provisions is voidable. Under this new statute, a "construction contract" includes contracts, subcontracts, or agreements with (among others) architects, engineers, contractors, construction managers, equipment lessors, or materials suppliers. "Construction contracts" are for the design, construction, alteration, renovation, remodeling, or repair of any building or improvement to real property, or for furnishing materials or equipment for the project. The term also includes moving, demolition, or excavation. BY RESPONDING TO THIS SOLICITATION, AND WHEN APPLICABLE, THE PROPOSER AGREES TO COMPLY WITH THE TEXAS BUSINESS AND COMMERCE CODE § 272 WHEN EXECUTING CONTRACTS WITH TIPS MEMBERS THAT ARE TEXAS GOVERNMENT ENTITIES.

7 **Texas Government Code 2270 & 2271 Verification Form**

9 Texas Government Code 2270 & 2271 Verification Form

If (a) Vendor is not a sole proprietorship; (b) Vendor has ten (10) or more full-time employees; and (c) this Agreement has a value of \$100,000 or more, the following certification shall apply; otherwise, this certification is not required. Pursuant to Chapter 2271 of the Texas Government Code, the Vendor hereby certifies and verifies that neither the Vendor, nor any affiliate, subsidiary, or parent company of the Vendor, if any (the "Vendor Companies"), boycotts Israel, and the Vendor agrees that the Vendor and Vendor Companies will not boycott Israel during the term of this Agreement. For purposes of this Agreement, the term "boycott" shall mean and include refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

Our entity further certifies that it is is not listed on and we do not do business with companies prohibited by Texas Government Code 2270 or that are on the Texas Comptroller of Public Accounts list of Designated Foreign Terrorists Organizations per Texas Gov't Code 2270.0153 found at <https://comptroller.texas.gov/purchasing/docs/foreign-terrorist.pdf>

I swear and affirm that the above is true and correct.

YES

8 **Logos and other company marks**

0 Please upload your company logo to be added to your individual profile page on the TIPS website. If any particular specifications are required for use of your company logo, please upload that information under the "Logo and Other Company Marks" section under the "Response Attachment" tab. Preferred Logo Format: 300 x 225 px - .png, .eps, .jpeg preferred

Potential uses of company logo:

- * Your Vendor Profile Page of TIPS website
- * Potentially on TIPS website scroll bar for Top Performing Vendors
- * TIPS Quarterly eNewsletter sent to TIPS Members
- * Co-branding Flyers and or email blasts to our TIPS Members (Permission and approval will be obtained before publishing)

8
1

Solicitation Deviation/Compliance

Does the vendor agree with the General Conditions Standard Terms and Conditions or Item Specifications listed in this proposal invitation?

Yes

8
2

Solicitation Exceptions/Deviations Explanation

If the bidder intends to deviate from the General Conditions Standard Terms and Conditions or Item Specifications listed in this proposal invitation, all such deviations must be listed on this attribute, with complete and detailed conditions and information included or attached.

TIPS will consider any deviations in its proposal award decisions, and TIPS reserves the right to accept or reject any bid based upon any deviations indicated below or in any attachments or inclusions.

In the absence of any deviation entry on this attribute, the proposer assures TIPS of their full compliance with the Standard Terms and Conditions, Item Specifications, and all other information contained in this Solicitation.

No response

8
3

Agreement Deviation/Compliance

Does the vendor agree with the language in the Vendor Agreement?

Yes

8
4

Agreement Exceptions/Deviations Explanation

If the proposing Vendor desires to deviate from the Vendor Agreement language, all such deviations must be listed on this attribute, with complete and detailed conditions and information included. TIPS will consider any deviations in its proposal award decisions, and TIPS reserves the right to accept or reject any proposal based upon any deviations indicated below. In the absence of any deviation entry on this attribute, the proposer assures TIPS of their full compliance with the Vendor Agreement.

No response

8
5

Felony Conviction Notice

Texas Education Code, Section 44.034, Notification of Criminal History, Subsection (a), states "a person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony." Subsection (b) states "a school district may terminate a contract with a person or business entity if the district determines that the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract." (c) This section does not apply to a publicly held corporation. The person completing this proposal certifies that they are authorized to provide the answer to this question.

Select A., B. or C.

A. My firm is a publicly held corporation; therefore, this reporting requirement is not applicable.

OR B. My firm is not owned nor operated by anyone who has been convicted of a felony, OR

C. My firm is owned or operated by the following individual(s) who has/have been convicted of a felony. (if you answer C below, you are required to provide information in the next attribute.

B. Firm not owned nor operated by felon; per above

86 If you answered C. My Firm is owned or operated by a felon to the previous question, you are REQUIRED TO ANSWER THE FOLLOWING QUESTIONS.

If you answered C. My Firm is owned or operated by a felon to the previous question, you must provide the following information.

1. Name of Felon(s)
2. The named person's role in the firm, and
3. Details of Conviction(s).

87 Required Confidentiality Claim Form

Required Confidentiality Claim Form

This completed form is required by TIPS. By submitting a response to this solicitation you agree to download from the "Attachments" section, complete according to the instructions on the form, then upload the completed form, with any confidential attachments, if applicable, to the "Response Attachments" section titled "Confidentiality Form" in order to provide to TIPS the completed form titled, "CONFIDENTIALITY CLAIM FORM". **THIS REQUIRED PROCESS IS THE ONLY WAY TO DEEM PROPOSAL DOCUMENTATION CONFIDENTIAL ANY OTHER CONFIDENTIAL DESIGNATION WILL BE DISREGARDED UNLESS THE DOCUMENT IS IDENTIFIED BY AND ATTACHED TO THE REQUIRED FORM.** By completing this process, you provide us with the information we require to comply with the open record laws of the State of Texas as they may apply to your proposal submission. If you do not provide the form with your proposal, an award will not be made if your proposal is qualified for an award, until TIPS has an accurate, completed form from you.

Read the form carefully before completing and if you have any questions, email bids@tips-usa.com.

88 Choice of Law clauses with TIPS Members

If the vendor is awarded a contract with TIPS under this solicitation, the vendor agrees to make any Choice of Law clauses in any contract or agreement entered into between the awarded vendor and with a TIPS member entity to read as follows: "Choice of law shall be the laws of the state where the customer resides" or words to that effect.

89 Venue of dispute resolution with a TIPS Member

In the event of litigation or use of any dispute resolution model when resolving disputes with a TIPS member entity as a result of a transaction between the vendor and TIPS or the TIPS member entity, the Venue for any litigation or other agreed upon model shall be in the state and county where the customer resides unless otherwise agreed by the parties at the time the dispute resolution model is decided by the parties.

90 Automatic renewal of contracts or agreements with TIPS or a TIPS member entity

This clause **DOES NOT** prohibit multiyear contracts or agreements with TIPS member entities.

Because TIPS and TIPS members are governmental entities subject to laws that control appropriations of funds during their fiscal years for contracts and agreements to provide goods and services, does the Vendor agree to limit any automatic renewal clauses of a contract or agreement executed as a result of this TIPS solicitation award to not longer than "month to month" and at the TIPS contracted rate.

9 1 Indemnity Limitation with TIPS Members

Texas and other states restrict by law or state Constitution the ability of a governmental entity to indemnify others. TIPS requires that any contract entered into between a vendor and TIPS or a TIPS Member as a result of an award under this Solicitation limit the requirement that the Customer indemnify the Vendor by either eliminating any such indemnity requirement clauses in any agreements, contracts or other binding documents **OR** by prefacing all indemnity clauses required of TIPS or the TIPS Member entity with the following: "To the extent permitted by the laws or the Constitution of the state where the customer resides, ".

Agreement is a required condition to award of a contract resulting from this Solicitation.

9 2 Arbitration Clauses

Except for certain circumstances, TIPS forbids a mandatory arbitration clause in any contract or agreement entered into between the awarded vendor with TIPS or a TIPS member entity. Does the vendor agree to exclude any arbitration requirement in any contracts or agreement entered into between TIPS or a TIPS member entity through an awarded contract with TIPS?

9 3 Required Vendor Sales Reporting

By responding to this Solicitation, you agree to report to TIPS all sales made under any awarded Agreement with TIPS. Vendor is required to report all sales under the TIPS contract to TIPS. If the TIPS Member entity requesting a price from the awarded Vendor requests the TIPS contract, Vendor must include the TIPS Contract number on any communications with the TIPS Member entity. If awarded, you will be provided access to the Vendor Portal. To report sales, login to the TIPS Vendor Portal and click on the PO's and Payments tab. Pages 3-7 of the Vendor Portal User Guide will walk you through the process of reporting sales to TIPS. Please refer to the TIPS Accounting FAQ's for more information about reporting sales and if you have further questions, contact the Accounting Team at accounting@tips-usa.com. The Vendor or vendor assigned dealers are responsible for keeping record of all sales that go through the TIPS Agreement and submitting same to TIPS.

9 4 Upload of Current W-9 Required

Please note that you are required by TIPS to upload a current W-9 Internal Revenue Service (IRS) Tax Form for your entity. This form will be utilized by TIPS to properly identify your entity.

9 5 CERTIFICATION REGARDING BOYCOTTING CERTAIN ENERGY COMPANIES (Texas law as of September 1, 2021)

By submitting a proposal to this Solicitation, you certify that you agree, when it is applicable, to the following required by Texas law as of September 1, 2021:

If (a) company is not a sole proprietorship; (b) company has ten (10) or more full-time employees; and (c) this contract has a value of \$100,000 or more that is to be paid wholly or partly from public funds, the following certification shall apply; otherwise, this certification is not required. Pursuant to Tex. Gov't Code Ch. 2274 of SB 13 (87th session), the company hereby certifies and verifies that the company, or any wholly owned subsidiary, majority-owned subsidiary, parent company, or affiliate of these entities or business associations, if any, does not boycott energy companies and will not boycott energy companies during the term of the contract. For purposes of this contract, the term "company" shall mean an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, that exists to make a profit. The term "boycott energy company" shall mean "without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company (a) engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law, or (b) does business with a company described by paragraph (a)." See Tex. Gov't Code § 809.001(1).

**9
6 CERTIFICATION PROHIBITING DISCRIMINATION AGAINST FIREARM AND AMMUNITION INDUSTRIES
(Texas law as of September 1, 2021)**

By submitting a proposal to this Solicitation, you certify that you agree, when it is applicable, to the following required by Texas law as of September 1, 2021:

If (a) company is not a sole proprietorship; (b) company has at least ten (10) full-time employees; (c) this contract has a value of at least \$100,000 that is paid wholly or partly from public funds; (d) the contract is not excepted under Tex. Gov't Code § 2274.003 of SB 19 (87th leg.); and (e) governmental entity has determined that company is not a sole-source provider or governmental entity has not received any bids from a company that is able to provide this written verification, the following certification shall apply; otherwise, this certification is not required.

Pursuant to Tex. Gov't Code Ch. 2274 of SB 19 (87th session), the company hereby certifies and verifies that the company, or association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, including a wholly owned subsidiary, majority-owned subsidiary parent company, or affiliate of these entities or associations, that exists to make a profit, does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this contract against a firearm entity or firearm trade association. For purposes of this contract, "discriminate against a firearm entity or firearm trade association" shall mean, with respect to the entity or association, to: "(1) refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; (2) refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or (3) terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association. See Tex. Gov't Code § 2274.001(3) of SB 19. "Discrimination against a firearm entity or firearm trade association" does not include: "(1) the established policies of a merchant, retail seller, or platform that restrict or prohibit the listing or selling of ammunition, firearms, or firearm accessories; and (2) a company's refusal to engage in the trade of any goods or services, decision to refrain from continuing an existing business relationship, or decision to terminate an existing business relationship to comply with federal, state, or local law, policy, or regulations or a directive by a regulatory agency, or for any traditional business reason that is specific to the customer or potential customer and not based solely on an entity's or association's status as a firearm entity or firearm trade association." See Tex. Gov't Code § 2274.001(3) of SB 19.

**9
7 CERTIFICATION REGARDING CERTAIN FOREIGN-OWNED COMPANIES IN CONNECTION WITH
CRITICAL INFRASTRUCTURE (Texas law as of September 1, 2021)**

By submitting a proposal to this Solicitation, you certify that you agree to the following required by Texas law as of September 1, 2021:

Proposing Company is prohibited from entering into a contract or other agreement relating to critical infrastructure that would grant to the company direct or remote access to or control of critical infrastructure in this state, excluding access specifically allowed by the Proposing Company for product warranty and support purposes. Company, certifies that neither it nor its parent company nor any affiliate of company or its parent company, is (1) owned by or the majority of stock or other ownership interest of the company is held or controlled by individuals who are citizens of China, Iran, North Korea, Russia, or a designated country; (2) a company or other entity, including governmental entity, that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or a designated country; or (3) headquartered in China, Iran, North Korea, Russia, or a designated country. For purposes of this contract, "critical infrastructure" means "a communication infrastructure system, cybersecurity system, electric grid, hazardous waste treatment system, or water treatment facility." See Tex. Gov't Code § 2274.0101(2) of SB 1226 (87th leg.). The company verifies and certifies that company will not grant direct or remote access to or control of critical infrastructure, except for product warranty and support purposes, to prohibited individuals, companies, or entities, including governmental entities, owned, controlled, or headquartered in China, Iran, North Korea, Russia, or a designated country, as determined by the Governor.

CERTIFICATION BY CORPORATE OFFERER

COMPLETE ONLY IF OFFERER IS A CORPORATION,
THE FOLLOWING CERTIFICATE SHOULD BE EXECUTED AND INCLUDED AS PART OF PROPOSAL FORM/PROPOSAL FORM.

OFFERER: Advanced Technologies Consultants
(Name of Corporation)

Thomas S. Close certify that I am the Secretary of the Corporation
I, (Name of Corporate Secretary)

named as OFFERER herein above; that

Thomas S. Close
(Name of person who completed proposal document)

who signed the foregoing proposal on behalf of the corporation offerer is the authorized person that is acting as

President - Advanced Technologies Consultants
(Title/Position of person signing proposal/offer document within the corporation)

of the said Corporation; that said proposal/offer was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.


CORPORATE SEAL if available

Thomas A. Close
SIGNATURE

10/14/2021
DATE

Required Confidential Information Status Form

Advanced Technologies Consultants

Name of company

Thomas S. Close - President

Printed Name and Title of authorized company officer declaring below the confidential status of material

110 West Main St.	Northville	MI	48167	800-348-8447
Address	City	State	ZIP	Phone

ALL VENDORS MUST COMPLETE THE ABOVE SECTION

CONFIDENTIAL INFORMATION SUBMITTED IN RESPONSE TO COMPETITIVE PROCUREMENT REQUESTS OF EDUCATION SERVICE CENTER REGION 8 AND TIPS (ESC8) IS GOVERNED BY TEXAS GOVERNMENT CODE, CHAPTER 552

If you consider any portion of your proposal to be confidential information and not subject to public disclosure pursuant to Chapter 552 Texas Gov't Code or other law(s), you **must attach a copy** of all claimed confidential materials within your proposal and put this COMPLETED form as a cover sheet to said materials then scan, name "CONFIDENTIAL" and upload with your proposal submission. (You must include all the confidential information in the submitted proposal. The copy uploaded is to indicate which material in your proposal, if any, you deem confidential in the event the receives a Public Information Request.) ESC8 and TIPS will follow procedures of controlling statute(s) regarding any claim of confidentiality and shall not be liable for any release of information required by law. Upon your claim and your defense to the Office of Texas Attorney General is required to make the final determination whether the information submitted by you and held by ESC8 and TIPS is confidential and exempt from public disclosure.

ALL VENDORS MUST COMPLETE ONE OF THE TWO OPTIONS BELOW.

OPTION 1:

I DO CLAIM parts of my proposal to be confidential and **DO NOT** desire to expressly waive a claim of confidentiality of all information contained within our response to the solicitation. The attached contains material from our proposal that I classify and deem confidential under Texas Gov't Code Sec. 552 or other law(s) and I invoke my statutory rights to confidential treatment of the enclosed materials.

IF CLAIMING PARTS OF YOUR PROPOSAL CONFIDENTIAL, YOU MUST ATTACH THE SHEETS TO THIS FORM AND LIST THE NUMBER OF TOTAL PAGES THAT ARE CONFIDENTIAL.

ATTACHED ARE COPIES OF _____ PAGES OF CLAIMED CONFIDENTIAL MATERIAL FROM OUR PROPOSAL THAT WE DEEM TO BE NOT PUBLIC INFORMATION AND WILL DEFEND THAT CLAIM TO THE TEXAS ATTORNEY GENERAL IF REQUESTED WHEN A PUBLIC INFORMATION REQUEST IS MADE FOR OUR PROPOSAL.

Signature _____ Date _____

OR

OPTION 2:

I DO NOT CLAIM any of my proposal to be confidential, complete the section below.

Express Waiver: I desire to expressly waive any claim of confidentiality as to any and all information contained within our response to the competitive procurement process (e.g. RFP, CSP, Bid, RFQ, etc.) by completing the following and submitting this sheet with our response to Education Service Center Region 8 and TIPS.

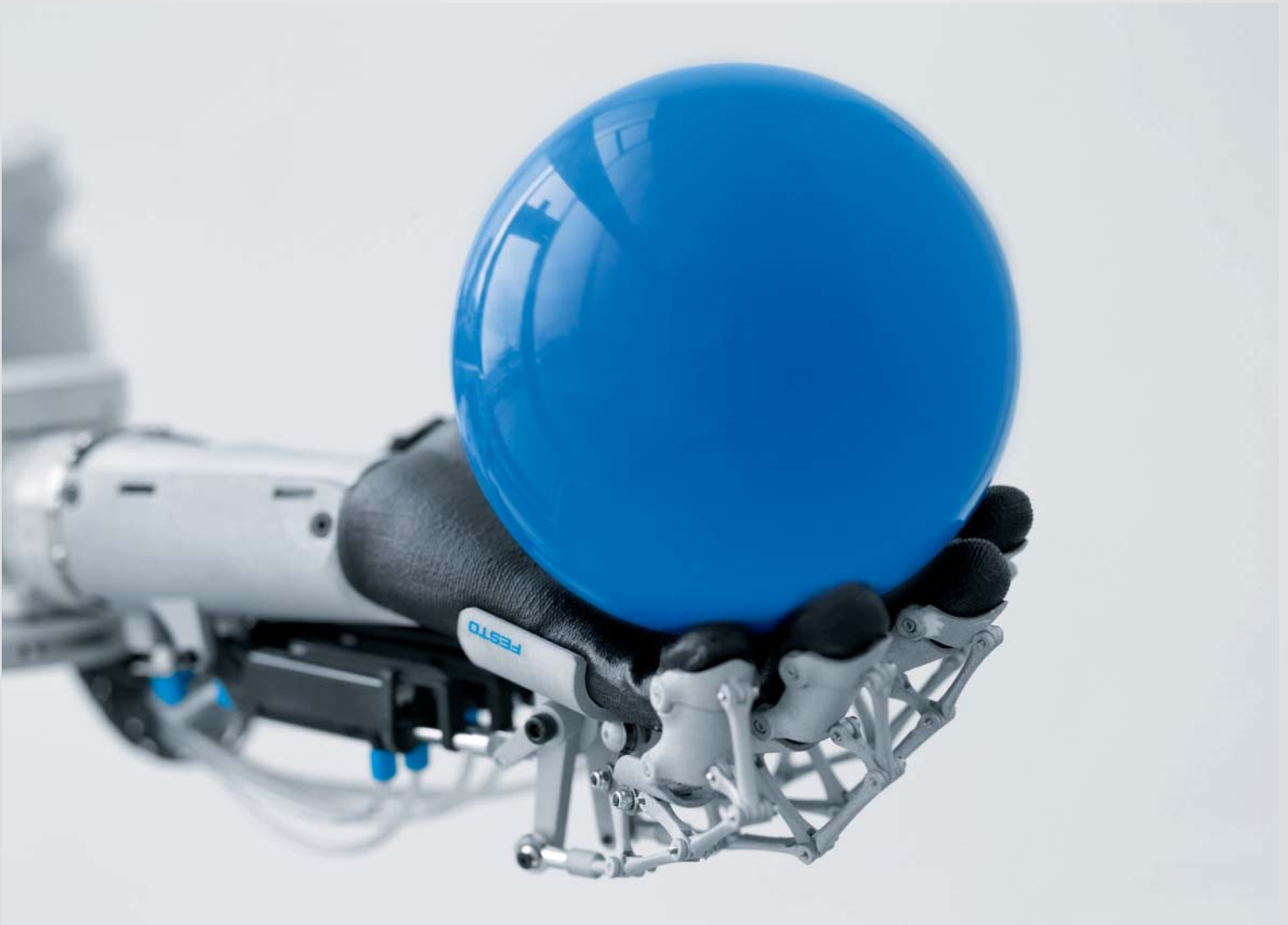
Signature Thomas S. Close Date 10/14/2021

PRODUCT OVERVIEW & SOLUTION'S GUIDE

Advanced Technologies Consultants



Texas Edition



ADVANCED TECHNOLOGIES CONSULTANTS, INC.
www.atctrain.com

"The Nation's Leader in Career and Technical Training."



TEXAS

Aaron Bloss

c. (317) 565-3677
aaronbloss@atctrain.com

Kevin Cabaniss

c.(977) 837-0642
kevincabaniss@atctrain.com

Jath Candy

c. (915) 356-4016
jathcandy@atctrain.com

Thomas Close

c. (248) 467-7740
tclose@atctrain.com

Aaron Paul

c. (214) 842-9016
apaul@atctrain.com

ADVANCED TECHNOLOGIES CONSULTANTS

**PROUDLY SERVING TEXAS SCHOOLS
FOR OVER 25 YEARS!**

Office: 800-348-8447
Fax: 248-348-3040

With offices in Houston, Dallas, and Austin, it is our pleasure to have served the entire state of Texas' CTE needs for over 25 years!

Advanced Technologies Consultants, Inc. (ATC) is the nation's leading distributor of name-brand technical training curriculum, equipment, software and furniture.

Since 1964, we have partnered with more than 2,200 school districts, vocational technical schools, community colleges and Universities. Providing each and every client, quality products, training, and support services, to successfully provide job ready skills for their students.

ATC provides a complement of services beginning with curriculum programming, planning, selection, implementation and on- going training and support services. ATC is committed every step of the way.

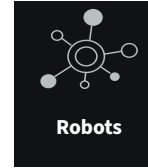
Our knowledgeable, experienced and friendly staff is at your service, providing you greater confidence in the classroom and laboratory. Our founding principle resonates throughout our organization to provide quality products, at a reasonable price, with free lifetime service.

TABLE OF CONTENTS

Robotics	4
Additive Manufacturing	10
Factory Automation	14
Industrial Manufacturing	19
Process Automation	28
Electricity & Electric Power	30
Renewable Energy	33
HVAC-R	36
CNC	37
Fab Lab	38
STEM / eLearning	45
Certifications	49



UNIVERSAL ROBOTS



THE WORLD'S #1 COLLABORATIVE ROBOT

They are rapidly changing industries all over with their versatility, ease of programming, fast set up, and safety.

Universal Robots' Collaborative Robots, or Cobots, are designed to share a workspace with humans, making automation easier than ever before for businesses of all sizes.



Free Easy Interactive training!

Free online academy and learn to master collaborative robots today become a robot programmer in 8 core modules

Universal Robots has developed online training modules to further lower the automation barrier.

The modules are offered free of charge, open to all, and built to deliver hands-on learning via interactive simulations.



Robotics education for all ages! Teach basic programming to middle school high school students, and train workf



UNIVERSAL ROBOTS

Universal Robots has developed online training modules to further lower the automation barrier. The modules are offered free of charge, open to all, and built to deliver hands-on learning via interactive simulations.

UR CLASSROOM



UR CLASSROOM & CNC Machine Tending

The core modules teach all essential concepts, terminology and programming commands needed to operate a UR robot. The 8 modules are a step-by-step simulation of setting up and programming a complete pick-and-place application.



students, teach intermediate programming and advanced motion control to force to the needs of local industries!



Automation Success begins with the Right Application.

The Solution: Vectis Cobot Welding Tool

NEW! Welding with UR Vectis

Versatile weld productivity tool powered by an industry-leading Universal Robots collaborative robot (cobot).



Versatility enabled by the safe, industry-leading Universal Robots UR10e cobot

Intuitive DIY programming via Vectis' Let's Weld Together® software interface

Technical and responsive support pre- and post-sale from a team that has over a century of collective robotic welding experience



Delivers ready-to-weld in 4 weeks, at an accessible price that includes shipping

Mobile 3' x 6' footprint provides flexibility in a compact fully-integrated package

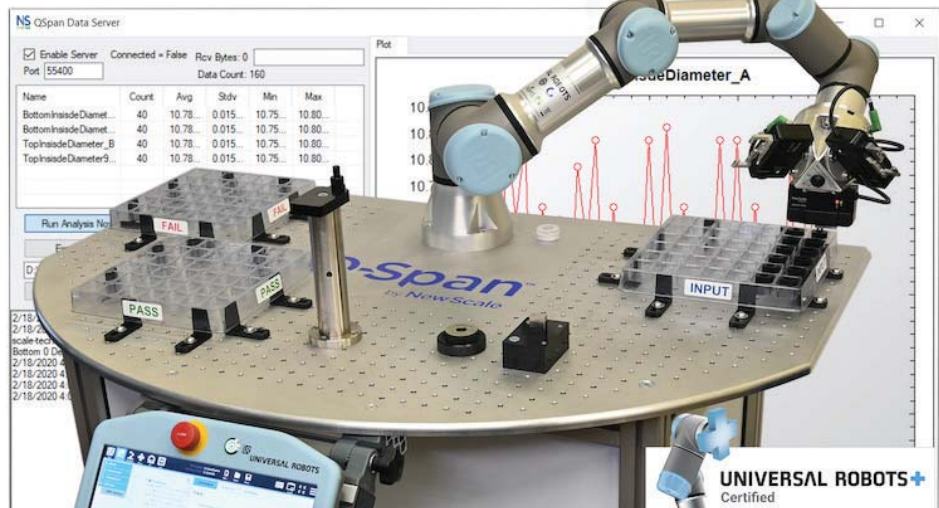
Peace-of-mind with an unprecedented 30 day return window, financing, and rent-to-own options



New Scale Robotics

Q-Span Workstation Kit from New Scale Robotics

A complete, ready-to-use solution for automating digital caliper measurements, data logging and part handling. The first application kit for quality inspection to be certified by Universal Robots and featured on the UR+ platform.





Automate your internal transportation of heavy loads and pallets easily and cost-effectively



The mobile robots from MiR are autonomous mobile robots (AMRs) designed to optimize productivity in logistics and manufacturing operations. The MiR AMRs make your employees more efficient by allowing them to focus on higher-value activities, while shortening lead time, reducing the risk of bottlenecks, and optimizing safety.

Robot arms turns your MiR into an automatic, mobile material gripper to optimize your internal logistics and production flows. With MiR's precision docking, the robot arm will be able to execute very precise and specialized tasks.

MiR Academy

Free online training for MiR robots

At MiR, we strive to help you to learn more about autonomous mobile robots (AMRs), how they work and how you can use them.

MiR Academy makes the technology behind AMRs gettable with engaging, online training courses.





Robotiq offers Plug + Play components for collaborative robots that are easy to use even if you don't have any background in robotics.

Robotiq is the humans behind the robots: an employee-owned business with a passionate team and an international partner network.



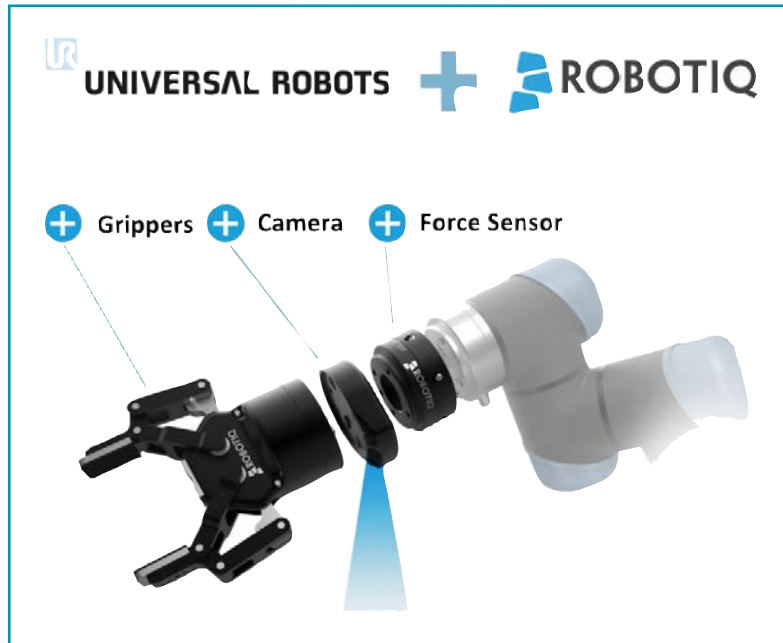
Robotiq CNC Machine Tending Kit

Robotiq uses its best off-the-shelf components to bring you an optimized kit for CNC machine tending applications.

Hand-E Gripper

Wrist Camera

Dual Hand-E setup



eLearning Program

The extensive eLearning program includes:

An introduction to robotic machine tending

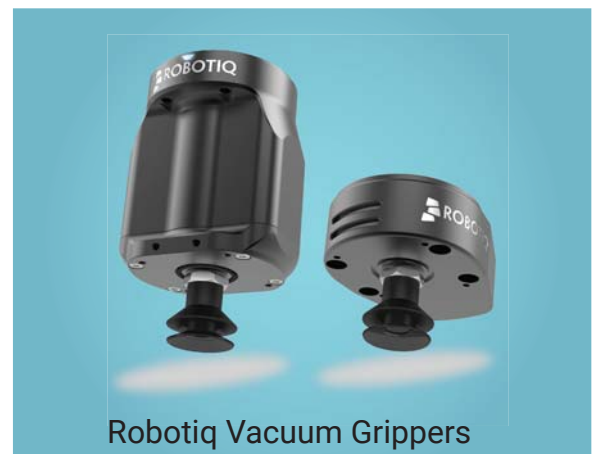
How to choose your first target cell to guarantee your success

Building your complete robotic cell using the lean robotics methodology

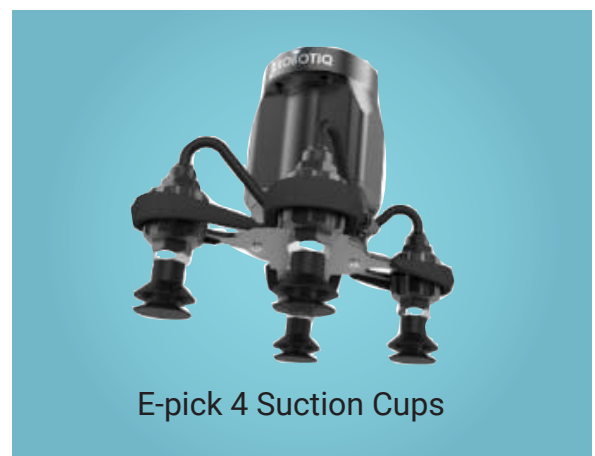
Off-the-production-line cell preparation

Installation guidelines and best practices

Project management tools, templates, case studies, and more



Robotiq Vacuum Grippers



E-pick 4 Suction Cups





Provide Students with a Globally-Recognized Robotics Certification Today!

Perfect solutions for all hands-on robotic training courses

The KUKA Robotics KORE program offers high schools, technical centers, community colleges and universities the opportunity to incorporate Certificate based robot education on KUKA products into their STEM, Advanced Manufacturing and Mechatronics programs.

KUKA Education: know-how for the future

For up-and-coming skilled specialists, in-depth knowledge of robotics and automation is essential. KUKA Education gives school and university students the opportunity of practice-oriented training on industry-standard hardware and software. This can take the form of ready-to-use training cells or individually configured components for your own solutions.



Official Robotics Education

- KORE ready2_palletize Education Cell
- A Official Robotics Education
- _A KORE ready2_print-starter Education Cell
- A Official Robotics Education
- _A KORE ready2_mill Education Cell

KUKA SMART FACTORY: Human-robot collaboration (HRC)

In human-robot collaboration, human and machine work hand in hand. The human operator controls and monitors production, the robots perform the physically strenuous work. Both contribute their specific capabilities: a decisive principle of Industrie 4.0.

Our integrators can customize solutions for all departments and programs of your school. From Architecture to Machining to Additive Manufacturing, we make buying a robot, integrating, programming, and installing as easy as possible.



KUKA ready2educate: Easy learning of the professional use of robots
KUKA ready2educate is the perfect training cell for hands-on education in robotics. It was specially designed for schools, universities and company training facilities. With the mobile training cell, the skilled specialists of tomorrow learn the professional use of industrial robots.





Makerbot's award-winning 3D printer is the perfect classroom addition. It is engineered for fast and reliable 3D printing every time. Flexible Connectivity, Advanced Software and Makerbot Support make Makerbot the most popular choice in education.

Ask about our MakerBot Education Bundles!



REPLICATOR Z18

The easiest-to-use 3D printer packages designed with both educators and students in mind.



REPLICATOR +



REPLICATOR MINI



MAKERBOT METHOD

The best price-to-performance ratio in the extra-large, professional 3D printer category.

3D PRINTING SOLUTIONS FOR EDUCATORS

The leading 3D printers in Education offer the easiest setup experience with no tinkering required. Get started right away with hundreds of 3D printing lesson plans.

SKETCH
CLASSROOM™

Now with Certification!

The easiest-to-use 3D printer packages designed with both educators and students in mind.

THE IDEAL CLASSROOM SETUP

The most reliable classroom 3D printing setup, giving your students the access they need and setting you up for classroom success.

IN EVERY CLASSROOM

With SKETCH, teachers can easily incorporate project-based learning and design thinking in various subjects while reaching deeper student engagement.





3D METAL PRINTING FOR EVERYONE! The ORLAS CREATOR® is the first affordable 3D metal printing machine. A full solution comprising a wireless control and an award winning CAD/CAM system.

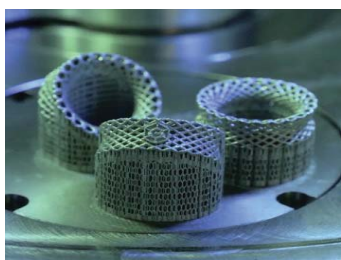
ORLAS CREATOR® Metal 3D Printer for Precision Components. The high end 3D metal printer ORLAS CREATOR offers you all the advantages of additive manufacturing. Components and constructions in almost every geometric shape that cannot be manufactured using traditional manufacturing techniques can be created easily and quickly– without the need for additional tools.

The system contains a construction chamber with an innovative coating concept that makes an accelerated and smooth operation possible – and hence a manufacturing speed that is 30 % quicker than comparable systems on the market.

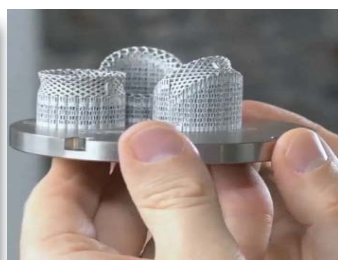
At the heart of the system is a 250 W fiber laser that ensures a consistent process conditions and a fine resolution, high component density and surface quality due to its beam quality and performance stability.

The handling and processing of the printing data is realized directly via the CAD file – with the help of the 3D printing module integrated into the ORLAS SUITE CAD/CAM-software.

With its machine, operating software, and interface development, ORLAS CREATOR fulfills all relevant criteria for a stand-alone system – and ensures easy integration possibilities.



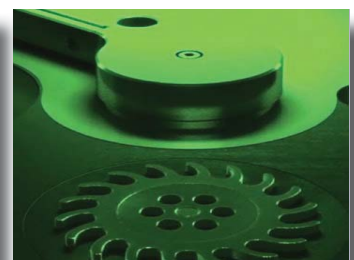
Dental components



Tooling



Mold making



Powder development





Metal powder-bed fusion provides high-quality and complex parts. It reduces total cycle time by about 50% and removes the need for wash/debinder and sintering/oven equipment used in bound metal deposition, atomic deposition additive manufacturing or other FDM-like metal 3D printers



XM200C

The XM200C makes quality metal powder-bed fusion available for universities, labs and small-to-medium businesses who need prototyping, tooling capabilities, or low volume casting alternatives.

XM200S

The XM200S is ideal for printing of small parts where high-performance metal powder-bed fusion applications and print speed are critical.

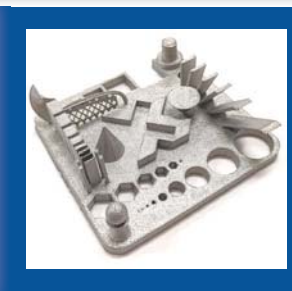
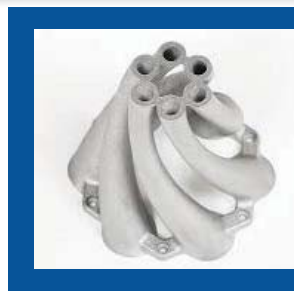
XM300C

The XM300C offers an expanded print area for larger, industrial metal powder-bed fusion applications that need prototyping, tooling capabilities, or low volume casting alternatives.

Xact Metal offers industry-standard:

- Stainless Steel: 316L, 17-4 PH, 15-15, 400 Series
- Super Alloys: 718, 625, Cobalt Chrome F75, Hastelloy®
- Tooling Steels: Maraging M300, H13 Bronze

By taking the essential additive manufacturing specs for metal powder-bed fusion (commonly known as Selective Laser Melting or Direct Metal Laser Sintering) and combining them with breakthrough technology, the XM200C is able to offer uncompromising quality for users.

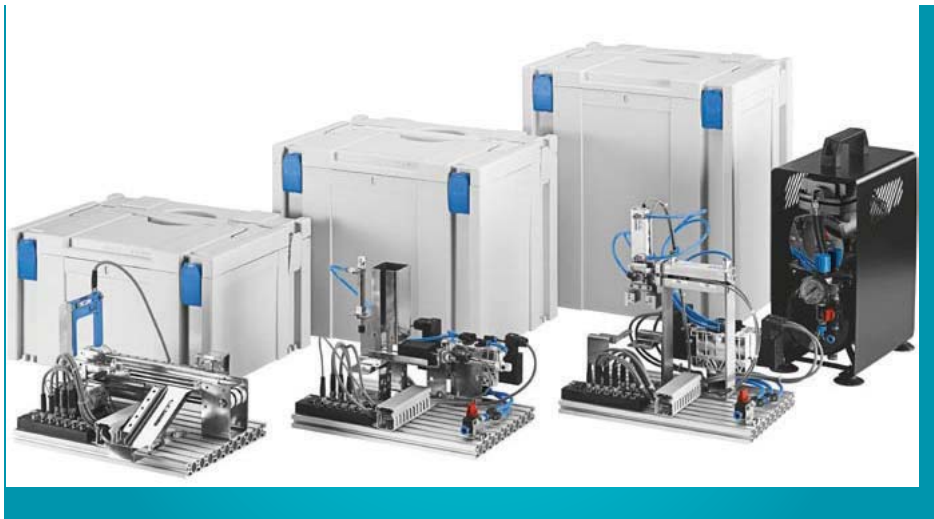




MECLAB

MecLab® Mechatronics Training System

The purpose of MecLab® is to provide students an opportunity to learn the practical and theoretical aspects of automation technology. It consists of three separate systems that can be used in combination or as stand-alone stations, sparking student interest in scientific thinking.



MecLab® Mechatronics Training System

The purpose of MecLab® is to provide students an opportunity to learn the practical and theoretical aspects of automation technology. It consists of three separate systems that can be used in combination or as stand-alone stations, sparking student interest in scientific thinking.



Topic coverage

- Sturdy, modular, and flexible
- Each system is delivered assembled, in its own storage unit, and ready for immediate use
- Replicates real industrial production processes
- Uses only industrial components
- Students are presented with a diverse range of modification, expansion and programming possibilities

With the ongoing transformation of industrial product development and production, and especially how Internet of Things (IoT), smart factories, cyber-physical systems and big data are driving technology capability – solutions must be ever faster, more diverse, more flexible and more intelligent, as well as sustainable, feasible, viable and desired.

Together with Festo we are now installing an industry 4.0 facility to support our educational and research environments at PDRL and BTH.





Advanced mechatronics and i4.0 learning system

MPS

MPS: Modular Production Systems

Use individual stations to teach a variety of technologies and automation principles.

Teach Technology Teach Automation Processes:

- Fundamentals:
- Pick & Place
 - Pneumatics • Testing & Quality Inspection
 - Hydraulics • Workpiece Processing
 - PLC controls • Workpiece Sorting
 - Robotics • Robotic Assembly
 - Sensors • Workpiece Storage & Retrieval

MPS® system 203 i4.0

The MPS® 203 I4.0 system is a small production line from the slightly adapted standard stations Distributing/Conveyor, Joining and Sorting. The entire system is networked and equipped with several RFID write/read heads.

MPS 400 i4.0

The training system MPS 403-1 is designed for training in basic skills and specialist knowledge in the area of automation technology and mechatronics

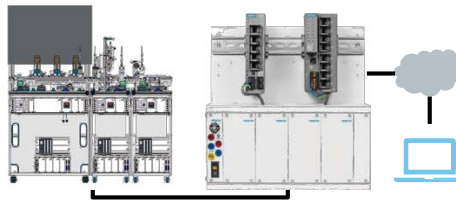
Benefits

In addition to the basics of mechatronics and automation technology, the system offers quick, simple, and broad access to the most important Industry 4.0 topics. The system's high degree of modularity is the basis for a clear and manageable learning pathway made up of modules, from stations through to a software-controlled network of systems. Comprehensive training documentation splits up complex topics into small steps and learning units, allowing structured yet flexible teaching. The system offers a simple way for students to develop understanding of topics such as HMI, network technology, RFID, smart sensors, and service-based software structures. The training process is supported by modern media such as QR codes for provision of information and interaction with the training system based on augmented reality.



Machine Safety

Integrate safety concepts in existing system



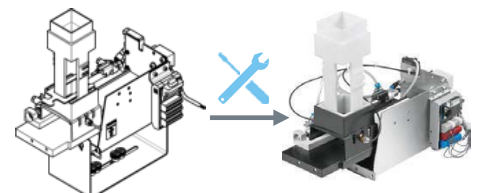
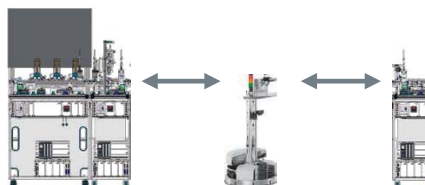
Industrial AGV integration

Robotino integration in MPS 400 systems



Basics metal working

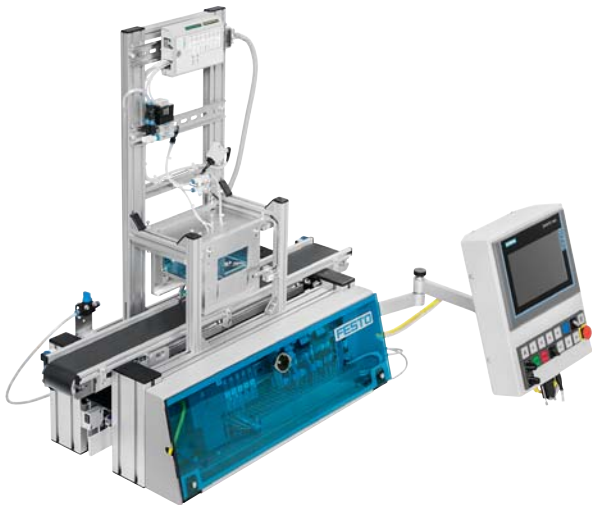
Manufacture your own stack magazine from scratch





The Cyber-Physical Lab

The CP (Cyber-Physical) Lab is a fully-fledged Industry 4.0-learning system in a compact size to convey practical knowledge of the digitalized industrial production. Its modular and flexible design allows hands-on projects in different learning scenarios. The acquired knowledge can be step-by-step thematically expanded to cover further material relevant to Industry 4.0.



**CP Lab 400
Complete
Systems**

Your benefits

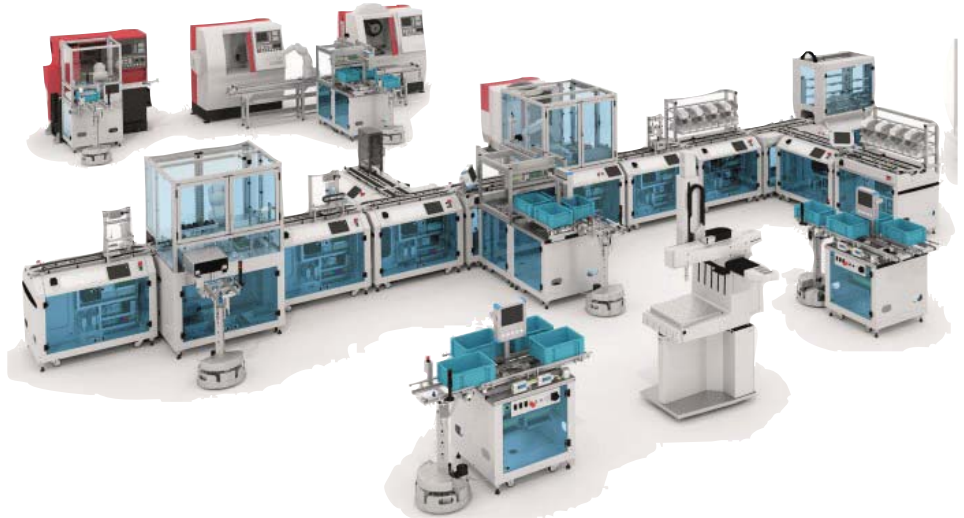
- Our expertise: all systems have been diligently **compiled by our experts** based on their long-standing experiences in Industry 4.0 education and training
- The **learning content** covers most relevant **Industry 4.0 topics**
- Well-thought-out arrangement** of the stations delivers consistent and meaningful processes which help you in setting up different learning scenarios with ease
- Plug and Learn:** All four CP Lab 400 complete system packages come with **MES4** and **CIROS®** Studio software and are fully equipped to start learning right away
- We provide you with the **fitting courseware**
- CP Lab 400 Complete Systems have a considerably **shorter delivery time** compared to a fully customized CP Lab system



The Cyber-Physical Factory

CP Factory – The Universal Industry 4.0 Training

Our universal cyber-physical learning and research platform for I4.0/IIoT – models the technologies of networked production and provides a modular smart factory system for teaching and research purposes.



The universal Industry 4.0 training factory

CP Factory reflects the new developments in networked production for Industry 4.0 and offers a modular smart factory system for teaching and research purposes.

The learning system includes not only the assembly line, but also different areas of production, such as lean production, logistics and quality assurance.



CNC machines and flexible manufacturing systems play a major part in the creation of customized products down to batch size 1.

The CP Factory integrates CNC technologies for use in industrial training projects and scenarios.

It therefore adds:

- Robot integration
- CAD/CAM products
- Simulation



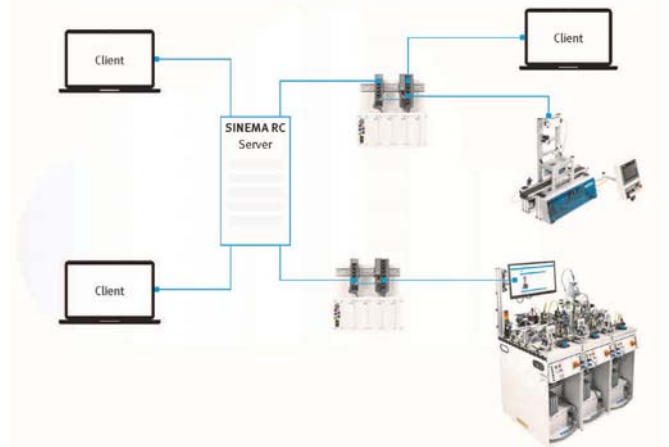


ADD-ON SPECIALITY PRODUCTS

Networking and Cyber Security NetLab

NetLab is FESTO'S modular learning concept that combines hardware and software components with courseware to integrate the study of IT networks and cybersecurity in our qualification programs for I4.0. With NetLab, complex learning topics like local and remote access for maintenance, Ethernet, switching, routing, encryption, VPN, and virtual LAN can be taught.

A comprehensive, modular teaching concept supporting multiple learning scenarios



Automation Simulation Software

CIROS® Studio is the professional tool for creating simulation models. Used by industry, this powerful development platform unites, in one common interface, three essential tools Simulation, Modeling, and Programming.



Green Factory Learning System Energy Monitoring and Management

Learning systems for energy-efficient, transparent, and flexible production.

Festo's modular Green Factory system offers add-ons to other learning systems, such as the cyber-physical systems, and can also be used as stand-alone learning systems for studying the topic of energy. The add-ons include hardware or software components, and cover the topics of energy monitoring, industrial energy efficiency, and energy generation.





Mechatronics Education for Middle School & High School Students

Low cost, Hands on Programs

Technology for secondary schools

Mechatronics aims at creating a design process that unifies a combination of engineering subfields. For the middle school or high school student, this means developing knowledge and skills in a cross section of engineering topics to serve as a foundation for continuing study in the field of Mechatronics.

For the school, low-cost, hands-on teaching equipment can help pave the way for instructors involved in Mechatronics education, from the basics and beyond.

Advanced Technologies Consultants, a leading distributor of Festo Didactic training solutions, offers a collection of turn-key, budget-friendly packages to help ease the instructor in the task of teaching Mechatronics. From equipment to courseware, Festo Didactic has the solutions to help maximize your learning success.

Mechatronics subfields covered:

- Mechanics/Mechanical Engineering
- Electronics/Electrical Engineering
- Process & Control engineering
- Systems Engineering
- Process Automation



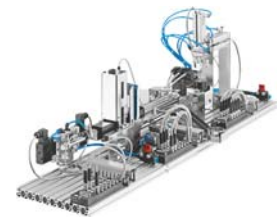
Fundamentals of Electrical Engineering/Electronics

- Proven training system that covers the basis of electrical engineering and electronics
- The universal patch panel includes a basic power supply unit and function generator
- The system is completely equipped with safety plugs and sockets based on state-of-the-art technology



Advanced PLC Training System

- Students learn how to establish communication, program, and transfer projects to a PLC and a touchscreen
- The system uses Rockwell Automation software and hardware that are used in actual factories
- Comprehensive curriculum with hands-on exercises accompanies each system



Programmable Logic Controllers - What is a PLC?

A PLC is an industrial-grade digital computer that typically has the sole purpose of controlling the functions of another device. It is widely used in industry and automation. Examples: You would be surprised to find out how widely used PLCs are in your everyday life – traffic lights, automatic doors, car washes, elevators, etc.; and in industry, they are everywhere.



MPS 200

The **Modular Production System (MPS)**

Each modular station has an industry-relevant process for training in automated technology. Combine as many stations as you'd like to teach to your needs, integrating mechanical systems, electrical engineering and IT to form mechatronics.

Complete with Industrial Simulations!

Flexible Manufacturing

- MPS stations can be combined into flexible manufacturing workcells.
- Workcells can be arranged in various sequences as desired.
- Conveyor system is utilized to transport “workpieces” among workcells.
- Workcells can be removed for individualized training.
- PLCs from various manufacturers can be utilized concurrently.

FESTO



Software

Simulation software to model and teach automation processes

MPS Modular Production System

Model industrial automation systems at various levels of complexity

Automated Processes and Flexible Manufacturing

Fully integrated automation training combining mechanics, pneumatics, electrical engineering, PLC control and communication interfaces



ADVANCED SKILLS TRAINERS



Advanced PLC Training System

Programming a PLC efficiently requires a strong familiarity with the specifics of the programming environment and languages. This training system allows students to acquire hands-on experience with industrial control equipment

This training system allows students to acquire hands-on experience with industrial control equipment. Realistic examples are used to motivate students. These examples are displayed on the graphic terminal, and correspond to real PLC applications that can be interfaced with the trainer.



The Advanced PLC Training System is equipped with state-of-the-art high-end products from Rockwell Automation. Students learn how to establish communication, program, and transfer projects to a PLC and a touchscreen. All components are mounted in one rugged case, which is perfect for transportation and storage. The comprehensive curriculum allows an efficient teaching. The System is compatible to numerous applications.



MicroLogix with Case



Advanced Skills Trainer 3355 Siemens

MECHANICAL DRIVES TRAINING SYSTEM



The Mechanical Drives Training System exposes students and trainees to the hardware, tools, and methods used by industrial mechanics to keep plants running. The system covers the identification, installation, and troubleshooting of common machine elements, and is suitable for beginners in vocational schools, as well as industrial mechanics who need to refresh their basic skills.

MECHANICAL DRIVES TRAINING SYSTEM



Electrical



Electrical installations From the main power source to common applications

Electrical distribution systems supply energy for lighting, heating, machinery operation, etc. in industrial projects and buildings. Electricians are responsible for the design, installation, and maintenance of electrical systems according to job specifications and local standards or codes.

Industrial Wiring Training

Systems are hands-on systems designed to train students for careers as electricians and electrical maintenance technicians.

Topic Coverage

- Enclosures and conduits
- Electrical power distribution
- Electrical wiring
- Three-phase motor starters
- AC and DC motor drives

Designed to train students for careers as electricians and electrical maintenance technicians, in compliance with the National Electrical Code® (NEC®)

Three systems are available for comprehensive topic coverage: Basic, Level 1, and Level 2; all include industrial-grade, UL-listed components



Industrial Wiring Learning Systems LV 46102

Fire alarm Learning System 46103

Teach the fundamentals of conventional fire alarm systems in a compact workspace

Topic Coverage

- Wiring and schematics
- Component location and wiring
- EOLR
- Remote zone indicators
- Pull stations/connections
- Control panels
- Horn strobes
- Junction boxes
- Layout diagrams

The Fire Alarm Training Systems are hands-on training tools designed to form students for a career as fire alarm technicians. These systems faithfully reproduce an environment where students can develop their skills in the installation and wiring of fire alarm systems.



CONVENTIONAL FIRE ALARM SYSTEM MODEL 46103-A



ADDRESSABLE FIRE ALARM SYSTEM MODEL 46103-E



Pipe & Steam Fitting



Steamfitters and pipefitters fabricate, assemble, install, maintain, and troubleshoot piping systems that carry water, steam, chemicals, or fuel used in heating, cooling, lubricating, and other industrial processes.

Piping and Backflow Prevention Training Systems

Foster skills development in the fabrication, installation, and testing of piping circuits made of different materials. Teach students how to enforce and follow the safety rules when working at industrial sites. The Backflow Prevention Training System features the most common check-valve backflow preventers used in typical residential and commercial installations.

Pumps

The Pumps Training Systems familiarize students with pump operation principles and associated maintenance tasks such as pump installation, lubrication, shaft alignment, inspection, and component replacement. Students also learn how to start up, operate, and troubleshoot industrial pumps in different configurations.

Topic coverage	Valve restriction
Pump installation, wiring, and maintenance	Air injection
Lubrication	Fluid mechanics
Shaft alignment	Laser alignment
Inspection	Vibration analysis



Pipes

The Piping Training Systems form a hands-on training program designed to train students for careers as pipe fitters and piping maintenance technicians.

Topic coverage	Valve maintenance
Motor operators	Fabrication, assembly, and installation
Pipes and pipe fittings	Measurement and layout
Valve types and operation	System testing
Safety valves	Safety rules and procedures
Steam traps	



Motor operators	Steam traps	Measurement and layout
Pipes and pipe fittings	Valve maintenance	System testing
Valve types and operation	Fabrication, assembly, and installation	Safety rules and procedures
Safety valves		



Industrial Controls



The Industrial Controls Training Systems are designed to teach the theory and techniques of electric motor controllers. They allow students to select and mount control devices to form typical control circuits, and to troubleshoot them once a fault is inserted. The systems offer unique controls training possibilities, are modular, and include insertable faults.



Industrial Controls Training Systems



Programmable Logic Controller Training System (add-on to 8036-1 or 8036-E)



Sensors Training System (add-on to 8036-2)

Training Systems available:

- Basic Controls, Model 8036-1, provides students with a complete basic training in motor controls.
- Programmable Logic Controller, Model 8036-2, introduces students to PLCs for motor operation control.
- Motor Drives, Model 8036-3, introduces students to dc and ac drives.
- Sensors, Model 8036-4, introduces students to photoelectric and proximity switches.

Rigging

FESTO

Moving machines is a basic requirement for any industrial plant. With the Rigging Training Systems, students learn how to move and install machines safely. Riggers need to be highly skilled and qualified to move machines safely and efficiently.

To help acquire these basic skills, the Rigging Training Systems were created to cover the fundamentals of rigging practices, including techniques to help students move and install machines safely.



Rigging Learning Systems 46109

TOPICS:

- Ropes and slings
- Wedge sockets
- Dollies and roller pipes
- Gantry cranes and hoists
- Machine installation and movement
- Lifting objects and unbalanced loads

Hands-on, task-based activities

As part of a rigging course, training, or certification program, learners rely on widely-used rigging techniques and tools to rig a wide variety of objects of different shapes and weights, while complying with safety practices to protect people and rigged equipment. This is where our training systems come into play.

Qualifying machinery-moving experts

Machines that need to be moved in industrial settings are all different, since they are usually built for special applications. Riggers are experts at lifting and moving large, heavy, and often unbalanced loads safely and efficiently around obstacles – a basic task in plants and other industrial environments.

Low Cost Solutions



TP fundamentals - Electric Engineering Learning Systems

The Electric Engineering Learning Systems is a universal patch panel using the proven 19 mm grid. The patch panel and basic power supply unit, which provides a function generator among other things, form the basis on which the digital and control technology component sets can be used. The system is completely equipped with safety plugs and sockets based on state-of-the-art technology.

LC201- Equipment set TP 201

Basic level: Basic electropneumatics training

Electropneumatics, Basic level. The most important basic principles in one compact book.

Top solenoid valves for training.



TP 101 & 501 Americas

Equipment set TP 501 America

Basic Level: Basic training in hydraulics

The Lab-Volt Hydraulics Fundamentals Successor. The Lab-Volt Fluid Power System has been re-engineered and transferred to Festo Didactic's Training Packages series.

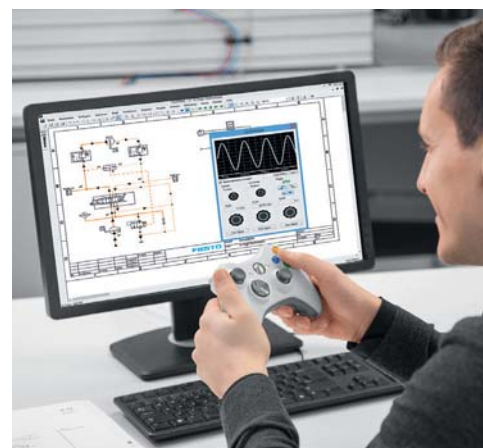
TP 501 and TP 601 America support vocational training institutes in their mission to educate skilled, resourceful technicians and engineers, as required by the local industry.



Fluid SIM

FluidSIM 6 will be launching at the end of 2020. Secure your update from FluidSIM version 4 to FluidSIM version 5 now and get a 10% discount on orders placed by June 30, 2020.

For more than 20 years, FluidSIM® has been the world's leading circuit diagram design and simulation program for pneumatics, hydraulics, and now also for electrical engineering. Being able to freely design control systems is motivating, and promotes creativity and focus. Beyond that, FluidSIM® provides teachers with a wealth of text, images, and videos for multimedia-based lesson planning. Experience real-time simulations with apprentices, specialists, or students and celebrate successful learning at all levels!



Process Controls

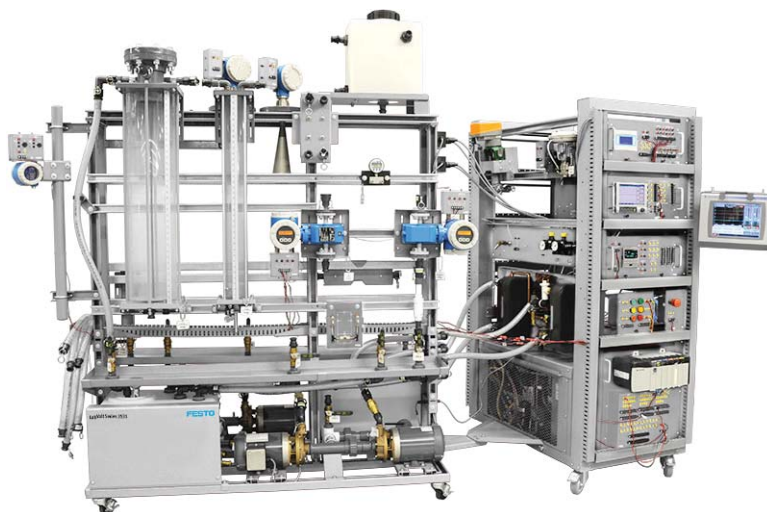


6090 Process Control Training System

6090 Process Controls

Process Control Training Systems

The Process Control Training Systems form a complete program designed to familiarize students with the fundamentals of instrumentation and process control. It demonstrates the control of pressure, flow, level, temperature, and pH processes. It can also demonstrate advanced process control techniques, such as feed-forward control, second-order control, and cascade control when used with a controller featuring these functions.



3531 Instrumentation And Process Control Training System

3531 Process Controls

Pressure, Flow, Level, and Temperature Process Learning Systems

The Pressure, Flow, Level, and Temperature Process Learning Systems introduce students to a wide range of industrial processes, as well as to their instruments and control devices. The training systems are part of the Instrumentation and Process Control program, which uses modern equipment and a complete curriculum to help students assimilate the theoretical and practical knowledge that is mandatory to work in the process control industry.



Oil & Gas



Three-Phase Separator Learning System - 3535-1

The Three-Phase Separator learning System demonstrates the fundamentals of oil separation when processing crude oil. Crude oil is a mixture of oil, water, and hydrocarbon gas, that must be separated before oil can be sent to a refinery. Accurate measurement of the gas and oil ratio is also essential, as it directly impacts production.

Demonstrate the fundamentals of oil separation, such as the effect of gravity and layer thickness, viscosity, retention time, density difference, vessel pressure, and oil/gas/water ratio. The system features real-life components that are used in the oil and gas industry.



Demonstrates the fundamentals of oil separation, such as the effect of gravity, the effect of layer thickness, viscosity, retention time, density difference, vessel pressure, and oil/ water/ gas ratio. Students perform experiments with measurement devices and control components commonly found in industry.



FESTO

TOPICS:

Nature of electricity, Ohm's law, Kirchhoff's voltage and current laws, using measuring instruments, solving series and parallel circuits, electromagnetism, electrical distribution, and troubleshooting electrical circuits.



An introduction to AC/DC electrical circuits in a suitcase

The AC/DC Training System provides a comprehensive, high-quality, and cost-effective solution for rapidly building student knowledge in electricity and electrical circuits through theory presentation and guided, hands-on lab exercises.

The AC/DC Training System is a state-of-the-art training system that is specifically designed to introduce students to the basic principles of electrical circuits, both in direct current (dc) and alternating current (ac). It provides a comprehensive, high-quality, and cost-effective solution to rapidly build student knowledge in electricity and electrical circuits.

The AC/DC Training System is a cost-effective solution that introduces students to the basic principles of electrical circuits, both direct current (DC) and alternating current (AC). It rapidly builds knowledge in electricity and electrical circuits, which is crucial for future electrical technicians, or any technician who has to deal with electricity.

Everything from a single source – Equipment for electrical engineering laboratories

No matter what your training focuses on, electrical engineering and electronics are part of the basic knowledge for all areas of production, process and automation technology.



With learning systems from Festo Didactic, learning laboratories – be they modular, customized or complete – can be equipped for any application and budget, whether for industry or trades, for teaching basic principles, for building systems or control or drive technology.





FACET® Fault-Assisted Circuit Electronics Training
A completely integrated training system for electronics
Training

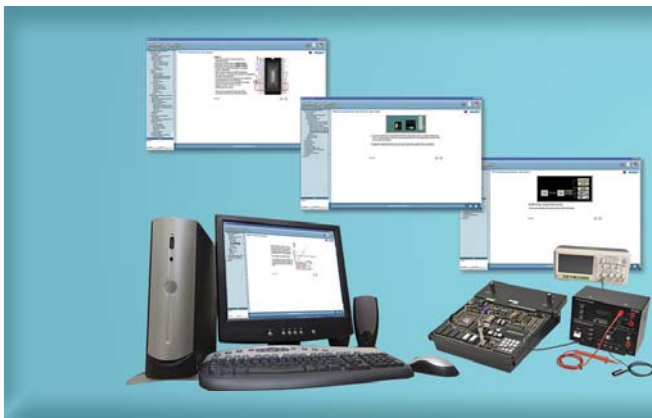
The **FACET®** training workstation consists of a base unit and your choice in a series of 30 boards to choose from, covering a wide range of electronics topics.

Each board comes with comprehensive, hands-on instruction with theory and practice. This courseware is offered in traditional paper format or on a computer based platform.

The eSeries for **FACET®** program currently consists of 30 courses, each carefully designed to foster recognition, understanding, experimentation, troubleshooting, application, and evaluation of analog and digital electronics circuitry

Topic Coverage

Basic Electricity & Electronics
Digital and Microprocessor Electronics
Industrial Electronics
Communications Systems
Estimated TOTAL program duration: 400 hours



FACET® Electronics Training System with eSeries

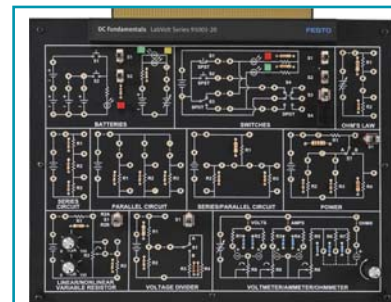
The computer based courseware, called eSeries for FACET®, can run as stand-alone or within the MindSight LMS platform, providing a seamless integration of courseware delivery and classroom management.

FACET® and eSeries – A completely integrated system

The FACET ® with eSeries training system is a unique combination of hardware and software, providing a complete learning solution for Electronics training.

This modular training system encompasses four areas of electronics:

- Basic principles of Electricity and Electronics
- Digital and Microprocessor Electronics
- Industrial Electronics
- Communications



FACET® Electronics Training System Base Unit



FACET® Electronics Training System Board





Topic Coverage

- DC and AC Power Circuits
- Solar Power
- Small-Scale Wind Power
- Lead-Acid Battery

- Basic Renewable Energy
- DC Power Electronics
- Home Energy Production
- Hydrogen Fuel Cell
- Electromechanical Systems

- Power Electronics
- AC Power Transmission
- Smart Grid Technologies
- DFIG Principles
- Power Transmission

ELECTRIC POWER TECHNOLOGY

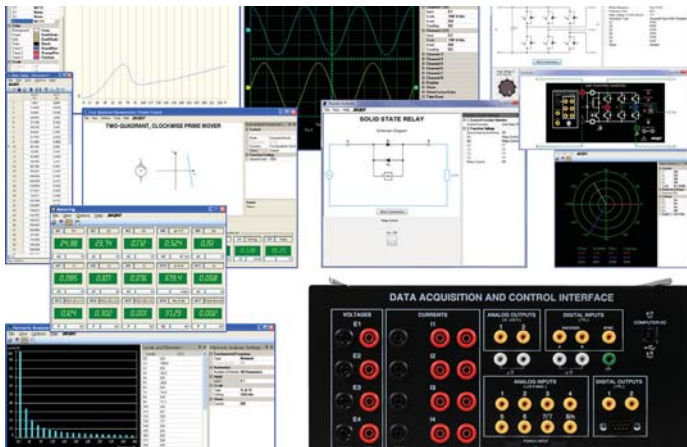
Electric Power is created by a generator at a power plant, then transmitted from the plant to the distribution grid, and sent from there to end users like homes, businesses, electric vehicle charging stations, etc. Our world-leading training program in electric power technology fully addresses the increasingly diversified needs for training

Flexible, complete training

The Electric Power Technology Training Program answers the increasingly diversified needs for training in the wide field of electrical energy. The program is a combination of hardware, software, and curriculum content aimed at maximizing learning and experimentation.



Electromechanical-Training-Systems



LVSIM-EMS is a powerful electromechanical systems simulation software sold for many years in the education market. The software capitalizes on the possibilities offered by multimedia to optimize students' understanding of the EMS. LVSIM-EMS covers the same courseware as the Computer-Assisted 0.2-kW Electromechanical Training System (EMS), Model 8006.

ELECTROMECHANICAL TRAINING SYSTEM #LV 8010-9

The training system teaches the principles of three-phase rotating machines.

- An introduction to the fundamentals of electricity, beginning with dc power circuits and ac power circuits.
- Advanced courses that cover different concepts and devices important to the study of three-phase rotating machines
- Courses that cover the operation of different rotating machines, such as permanent-magnet dc motors, induction machines, and synchronous machines.
- Optional courses that cover less common machines, such as conventional dc machines, universal motors, and single-phase induction motors.





Workforce-Ready, Hands-on
Training

The need for innovative technologies to make the grid smarter, engineers to design the systems, and technicians to service and maintain these technologies are in great demand.

The production of energy using renewable natural resources such as wind, sunlight, rain, tides, geothermal heat, etc., has gained much importance in recent years as it is an effective means of reducing greenhouse gas (GHG) emissions.

Training systems cover such topics as:

DC power circuits, lead-acid batteries, solar and wind power, hydrogen fuel cells, home energy production, and large-scale energy storage.

Training solutions in renewable energies cover three areas of expertise:

- Basic Renewable Energy
- Home Energy Production
- Hydrogen Fuel Cell



Renewable energies



The production of energy using renewable natural resources such as wind, sunlight, rain, tides, geothermal heat, etc., has gained much importance in recent years as it is an effective means of reducing greenhouse gas (GHG) emissions. The need for innovative technologies to make the grid smarter, engineers to design the systems, and technicians to service and maintain these technologies are in great demand. Technicians handle the maintenance and repair of wind turbines.



Home Energy Production Training System 8010-7



Renewable Energy Basic Training System 8010-5



Hydrogen Fuel Cell Training System 8010-8





Wind and solar power

Modular programs covering fundamentals, installation, operation, maintenance, and servicing of solar and wind energy systems

Solar and wind energy training systems integrate high-quality components currently used in residential, commercial, and industrial applications, and include everything required to operate as stand-alone, hands-on systems.



SOLAR / WIND ENERGY

#LV 46549

The Solar/Wind Energy Training Systems form complete hybrid-energy training systems. These training systems demonstrate how wind turbines and solar cells are being used in the consumer and industrial markets to supplement the world's power needs. They constitute a modular program that covers the history, fundamentals, installation, operation, maintenance, and servicing of solar energy and wind energy systems.



SOLAR THERMAL ENERGY

#LV 46548

The Solar Thermal Training System forms a complete hybrid energy training system that demonstrates how solar radiant energy can be harnessed from the sun and converted to solar

thermal energy in order to elevate air, water, and surface temperatures within a residential home or commercial business. Students learn how to install the system components, operate the system, and measure different parameters, such as pressure, temperature, and flow rate.



GRID-TIE TRAINING SYSTEM

#LV 46546

Lab-Volt's Grid-Tie Training System provides hands-on training in developing the skills required for installing a grid-tied system. The Grid-Tied Systems trainer includes an AC Distribution Panel, Combiner Box, Sunny Boy

Grid-Tie Inverter, AC and DC Cut-offs, and a string inverter simulator. The Lab-Volt Grid-Tie Training System provides topic coverage of a typical system configuration.



WIND TURBINE NACELLE

#LV 46124

The Wind Turbine Nacelle Trainer is a complete scaled-down version of commercial wind turbine nacelles. The trainer consists of a complete drive train including the main shaft, a gearbox with a transparent side cover, speed sensors, a hydraulic brake, and an asynchronous generator.

Lab-Volt offers two Wind Turbine Hub Training Systems – an Electrical Pitch Control Trainer and a Hydraulic Pitch Control Trainer – featuring all the components typically found in the hub of a commercial wind turbine and a representation of the wind turbine



GEO THERMAL

#LV 46126

This system allows students to develop knowledge in heat transfer and air conditioning. The exercises are designed to learn the skills required during installation, operation, and troubleshooting of geothermal heat pumps.



**EDS® – Environmental Discovery
System for Water Management**

EDS® Water Management: Discovering the water circuit

The EDS® for Water Management is a modular training system which represents the core processes of a water and wastewater treatment plant in the form of a water loop from the source to the wastewater treatment plant and back again.

Thanks to its industry-oriented design, EDS® for Water Management makes it possible to explain the principles behind the collection, extraction, transport, and treatment of water and wastewater. It offers a compact introduction to measurement, open-loop control, and closed-loop control technology.

- | | |
|----------------------------|------------------------------|
| Water Purification Station | Transport Station |
| Water Supply Station | Wastewater Treatment Station |
| Wastewater | Sand Filtration Station |



Basic Water Circuit System:
Fully equipped - Four
become one!



FESTO

HVAC-R Skills Training system


HVAC Skills Training

Assemble, test, disassemble...and learn

Whether working on the service, design, or application side of the HVAC-R industry, workers must possess strong manual abilities. Hands-on training is critical for becoming familiar with the large array of tools and equipment they will use to install, maintain, or repair various systems in real-world situations.

Whether working on the service, design, or application side of the HVAC-R industry, workers must possess strong manual abilities. Hands-on training is critical for becoming familiar with the large array of tools and equipment they will use to install, maintain, or repair various systems in real-world situations.






Building HVAC

Teach the fundamentals of modern building HVAC controls in a compact system

This system teaches modern HVAC direct digital controls (DDC) of commercial buildings using components from Johnson Controls. Devices from the system communicate over an SA bus or FC bus using the widespread open source BACnet MS/TP protocol.




Geothermal Energy

A compact workstation to teach the fundamentals of residential geothermal heat pumps

This system allows students to develop knowledge in heat transfer and air conditioning. The exercises are designed learn the skills required during installation, operation, and troubleshooting of geothermal heat pumps.

Other skills trainers:

Heat Pump	Dual Temperature Refrigerator
Air Conditioning	Beverage Cooler
Universal Refrigeration	Domestic Freezer



Heat Pumps

This skill trainer includes the basic components of a typical heat pump unit, and can be operated in two modes: cooling or heating.

This Skills Trainer is designed to teach the basic skills of wiring, piping, evacuating, charging, testing and troubleshooting. It is designed to be assembled, tested, and disassembled by one or two students performing a series of tasks.





Supplying technical production, Education & training equipment "Tailored to the future"

Emco CNC machine tools for industrial training.

EDUCATION MANUAL MACHINES

For use in both, industry & Education: High precision job production or repairs. The conventional lathes are mainly used where highly accurate work needs to be carried out in a small space. And, for the production of small series or big workpieces cycle-controlled lathes represent an efficient alternative.

Training & CERTIFICATION

Siemens SINUMERIK Operate software, including ShopMill and ShopTurn. On-site training from Siemens, covering three levels of operation and programming training for programmers, operators and users. Upon completion, students are Siemens certified.

EMCO e-learning Courseware

Full suite of online learning resources including, a complete curriculum material for basics in Turning and Milling Technology, Metal Cutting Technology, Quality Management, and CNC Programming



CONCEPT MILL 260



CONCEPT MILL 55

CNC MILLING MACHINES

Whether used for training purposes or for manufacturing small series – the Concept MILL and EMCOMAT FB series are designed to effortlessly master this balancing act. The modular concept of the machines offers users a vast playing field for adapting the machines to their individual requirements.



CONCEPT TURN 105

CNC TURNING MACHINES

Flexibility is one of EMCO's top priorities, as is the flexibility of its machines: The EMCO Concept TURN and the EMCOMAT series are best suited for CNC training and for manufacturing precision workpieces at the same time. With their modular construction, the EMCO machine tools can be easily adapted to meet virtually every need.

Whether for **vocational schools or CNC training**, the Concept MILL series can be used very flexibility: thanks to its modular design it can be connected to a CIM network and – equipped with training software and courseware – it can be applied for training purposes as well.





What is a Fablab? A Fab Lab, or digital fabrication laboratory, is a place to play, to create, to mentor and to invent: a place for learning and innovation.

Fab Labs provide access to the environment, the skills, the materials and the advanced technology to allow anyone anywhere to make (almost) anything.



lab design

FAB LAB

A FABLAB or Makerspace is a workshop where students can turn their Ideas (I), into a Design (D), and ready them for Production (P). ATC 3D Fabrication Labs offers a variety of products that can help in every step of the way!

Fab Lab equipment to get you hands-on with the 3D Printers, Laser Cutters, Vinyl Cutter, Sewing area, and software design all in one day! . The Fab Lab at Lake Michigan College is an open access digital fabrication studio and collaborative workshop. We provide access to information, tools, software and space.





Gravograph Laser Engravers are the ideal tool for engraving and cutting a wide variety of materials. Use a laser to create a plethora of products in many different industrial applications.



<p>DESIGN Series LS 900 XP</p>	<p>The LS900 is our large format engraving and cutting solution, perfect for reaching optimum productivity.</p> <p>The engraving surface of this industrial laser measures 24" x 24". It is ideal for marking or cutting of medium and large format media.</p>
<p>IDEA Series – LS 100 EX</p>	<p>The LS100 and LS100EX are rugged CO2 lasers and can be set up in a factory, workshop, office or retail outlet. Suitable for most marking, cutting and engraving applications including: trophies and awards, gifts, leather goods, acrylic, crystal and glassware, barcodes, data matrixes, photo, marking and rubber stamp production.</p>
<p>PRODUCTION Series LS 1000 XP</p>	<p>The Gravograph LS1000XP combines numerous innovation functions and features into one unique solution aiming to reduce production times.</p> <p>The LS1000XP is a true all around machine. The large 48" x 24" marking area and unlimited X & Y pass through creates a functional and adaptable environment. The standard flat works and finned cutting table, allow you multitask jobs in your laser and decrease your production time.</p>



The “Professional’s” 3D Printer!

Designed and made to be found on every architect, engineer, and designer’s desk, Ultimaker is setting the standard for dependable and efficient 3D Printing.

Ultimaker products are not only ideal tools for developing creative young minds – they are also built for the demands of classroom use. From affordability to advanced dual extrusion and connectivity, we have a 3D printer suited to your needs – all renowned for reliability and ease of use

Prepare pupils and students for tomorrow’s world, today. 3D printing in education provides unique learning opportunities across science, technology, engineering, art, and maths. Discover how educators are engaging students as never before.

K-12 Schools love the Ultimaker printer in all classrooms, including: Architecture, Automotive, Art, Aerospace, Fab-labs, Rocketry, Robotics, and Jewelry classes



Ultimaker S5
Powerful, reliable, versatile



Ultimaker S5 Pro Bundle
Industrial production power on your desktop



Ultimaker S3
Massive performance in a small footprint



{FINEST SMALL-FORMAT CNC
MACHINING CENTER}



Axiom Precision offers a wide range of machines to address nearly any CNC application. Each machine has been thoughtfully designed, rigorously tested, and offers a full range of accessories to ensure that you have everything you need to get up and running.



ELITE SERIES

Driven for speed, accuracy & repeatability.

ICONIC SERIES

The most accurate entry-level CNC machine on the market.

PRO V5 SERIES

Electro spindle performance, plus



Techno **CNC** Systems



Techno CNC Systems Educational Sector offers high speed, affordable industrial quality CNC Routers and CNC Plasmas in a wide range of sizes with work areas available from 12" x 12" to 5 x 10. All machines offer endless STEM opportunities. We have made it our goal to help the next generation of woodworkers/machinists to learn on the best CNC equipment in the country.

We provide exclusive educational packages to schools and Universities that are looking to incorporate CNC technology into their schools without surpassing a budget. Every machine is installed and supported by local

Techno CNC Systems representatives to ensure a successful startup. We offer trainings to schools and Universities and live demos to help ensure success in your FabLab!



HDII Tabletop CNC Router

The HD-II Table top machine includes a 2HP HSD high frequency collet spindle, and a vacuum t-slot table, which allows for mechanical clamping/vacuum hold down.

Atlas Series CNC Router

The Atlas Series machine is all steel construction, providing the rigid foundation required for ultra-smooth routing results.



GRAPHTEC CUTTERS

The GRAPHTEC CE6000 Plus Series Vinyl Cutter / Cutting Plotter is amongst the easiest to use on the market whilst yielding high quality results every time.

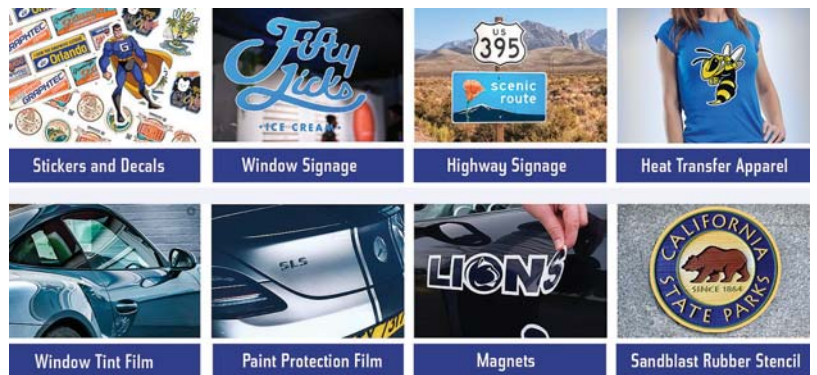
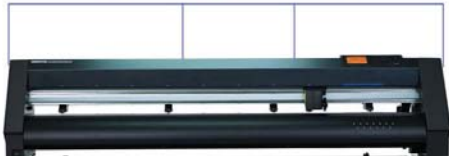
- **ARMS 5.0** : Graphtec's renowned Advanced Registration Mark Sensing system produces high precision print & cut results. Easily produce copies directly from the cutter using the copy button.
- **INTUITIVE OPERATION** : The large 3.7" LCD screen makes navigation simple for all users. Set up to 16 preset cutting conditions for your most commonly used materials - giving you the perfect cut every time.
- **EXPANDED AREA CUTTING** : Graphtec utilizes media more efficiently than the competition. Smaller side margins and the ability to cut printed objects outside of the registration marks yields up to 30% higher output.



GRAPHTEC CE6000

HIGH-PERFORMANCE CUTTING PLOTTERS

CUTTING WIDTHS
15" / 24" / 50"



CE7000 SERIES



FC9000 SERIES





GMI can help with your complete lab!

Services go beyond just offering the highest quality furniture products. We will be there to assist you in every step of the process, from the initial planning stages to the finished installation. Our expertise in furniture and workstation manufacturing, teamed with some of the leading manufacturers of styling chairs and equipment.



Contact us and see how we can set up the ideal lab in your facility!



WWW.PTMIM.ORG





Bionics4Education inspires and engages learners to apply STEM concepts to design bionics-inspired projects. Promoting creativity and fun, it is the optimal balance of digital and hands-on learning.

What is Bionics?

Bionics, or bio-inspired engineering, is based on the fact that nature has already solved many of the problems we deal with every day. The organisms and ecosystems that surround us face many of the same challenges that we do. For example, they need to eat, stay warm, stay safe, stay hydrated, conserve energy, etc. And they must do this without harming their own environments.



BionicsLab – Learning from and with nature

The bionics case was specially developed for introducing bionics in schools. It allows pupils to experiment by themselves and to experience the basic principles of bionics and scientific work thanks to 6 exciting experiments.



Bionics Kit

All bionic objects are actuated by servo drives and controlled by a microcontroller. Detailed instructions allow students to create the objects and easily control them by using their smartphones, tablets, or computers..



What's Included?

The Bionics Kit contains the material to build three different bionics-inspired projects: Bionic elephant, Bionic fish, Bionic chameleon.

All bionic objects are actuated by servo drives and controlled by an Arduino microcontroller. Detailed instructions allow students to create the objects and easily control them by using their smartphones, tablets, or computers.

FESTO

Integrative Stem



Integrative STEM education is about making connections across more than one discipline. When opportunities to learn math and science are intertwined with the concepts of technology and engineering in an interactive environment, student interest is sparked, communication and collaboration skills are developed, and student competence is fostered.

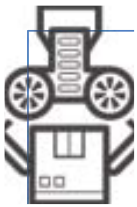
Turnkey solutions for high school STEM programs

Entrepreneurial-Minded Learning
Modular Project-Based Learning
Collaborative / Scenario Based Learning
Backward Design

Making the connections in secondary education

Integrative STEM Education is about intentionally combining math and science concepts with technology and engineering skills to solve problems. Students who engage in integrative STEM projects in order to solve authentic problems develop communication and collaboration skills, as well as sustained interest in STEM disciplines and increased competency levels.

There are 3 learning clusters within the curriculum:



Advanced Manufacturing

- Innovative technologies are changing the manufacturing landscape so it's important that students learn the foundation of advanced manufacturing through practical application that emphasizes innovation, problem-solving, and critical thinking using hands-on training systems.



Mechatronics

- Integrating the fields of mechanical, electronics, and computer science, students explore an innovative problem-based approach to learning mechatronics using hands-on trainers and robotic systems.



ENVIRONMENTAL

- Environmental discovery connects students to the world around them, enabling them to make connections so they can examine how and why things happen in order to make their own decisions about environmental issues.

Project-Based Approach

The STEM courses are designed with an emphasis on project-based learning with real-world scenarios. Each STEM course is presented with a Project Challenge, whose overarching path is proposed to students at the start of the course. Students then use the Engineering Design Process to complete various Support Projects as they progress on the Challenge path.

Making connections through a learning cluster environment

The “learning cluster” approach of our Integrative STEM solution is inherently flexible and allows a STEM classroom to consist of modules from all clusters, specific clusters, or a variety of each. The courses are assigned to one of the three learning clusters: Advanced Manufacturing, Mechatronics, and Environmental Discovery. Each course in our STEM solution allows students the opportunity to explore real-world problems, reflect on the problem-solving process, develop design solutions, and solve problems in science, technology, engineering, and math fields.

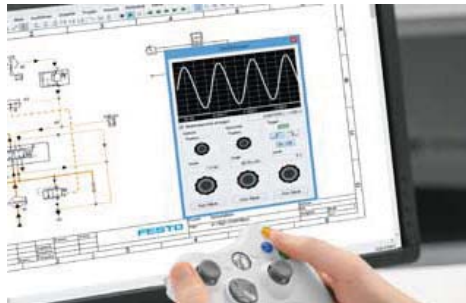
FESTO



**pneumatics, hydraulics & electrical
engineering simulation**

eLearning

FLUIDSIM, CIROS, LVISM & IN-
DUSTRIAL CONTROLS SIMU-
LATION



FluidSIM 5

FluidSIM 5 is a comprehensive software for the creation, simulation, instruction and study of electro-pneumatic, electro-hydraulic, digital and electronic circuits. All of the program functions interact smoothly, combining different media forms and sources of knowledge in an easily accessible fashion.



PNEUMATICS, HYDRAULICS & ELECTRICAL
ENGINEERING SIMULATION



Industrial Controls Simulation

The Industrial Controls Simulation Software features true simulations of the components of the Industrial Controls Training System, Series 8036. The precise simulations allow students to complete all the exercises in the training system courseware on a computer without the need for any actual equipment



INDUSTRIAL TRAINING ZONE



LVSIM-EMS

Replicates the Electromechanical Training System, enabling students to perform actual experiments using virtual equipment. Students prepare for laboratories in advance using virtual equipment, thereby decreasing the time they require to perform the exercises using actual equipment.



ELECTROMECHANICAL SYSTEMS SIMULATION



CIROS

CIROS® Studio is the professional tool for creating simulation models. Used by industry, this powerful development platform unites, in one common interface, three essential tools Simulation, Modeling, and Programming.



AUTOMATION TECHNOLOGY APPLICATIONS

SIMUTECH

MULTIMEDIA

Simulation Training System



Create highly skilled job candidates for the growing manufacturing market. The manufacturing landscape is changing by the minute, enable your students to meet the challenges ahead of them. Equip your students with the technical skills needed to fill the 4.6 million manufacturing jobs available in the next decade.



LEARNING LABS

First step in the Simutech Training System. Your professionals will learn the basics of electrical troubleshooting as well as the behavior of individual components used in industrial machinery. Here, your learners will master troubleshooting procedures and techniques before advancing to the circuit faults in the Troubleshooting Simulations.



TROUBLESHOOTING SIMULATIONS

Simutech's Troubleshooting Simulations immerse your professionals in deep learning environment, where they will acquire and practice the crucial skills needed for troubleshooting electrical faults in industrial machinery. Each simulation is based on a real-world scenario and contains a wide variety of practice faults.



LEARNING MANAGEMENT SYSTEM

Simutech's new Learning Management System gives administrators the big picture. They can monitor trainee progress and access data and stats from anywhere. The data show who's ready to go live and who still needs more practice, giving management valuable, data-backed insights to drive decision-making. Achieve cost savings and other efficiencies by deploying talented staff where it counts!



Effectively train through simulation.

Use simulation to teach your students everything from the basics of electrical troubleshooting to large automated industrial processes.

Our systematic approach teaches students how to think through technical problems quickly and troubleshoot effectively—a highly attractive skill to manufacturing recruiters.



Learning Through AR / VR Experiences

As a hardware and software solution, zSpace delivers a stunning interactive experience by integrating the latest AR/VR technology in an all-in-one computer and laptop.



Educational Content

Hundreds of learning activities and teaching resources

Software

A suite of learning apps built for zSpace

Hardware

zSpace all-in-one computers and laptops with AR and VR capabilities

The freedom to move and interact!

Every zSpace system has tracking built into the display. These sensors track your zSpace stylus and glasses. As you tilt your head to look around an object, zSpace dynamically updates to display the correct perspective in full, high definition.

Stylus Tracking System Glasses

- The zSpace stylus allows you to bring objects out of the screen as if they were real objects
- Every zSpace system has tracking built into the display
- Lightweight eyewear unlocks the 3D magic of zSpace



LAPTOP

AIO PRO

AIO

zSpace utilizes three sensory characteristics to create a natural and intuitive product

- Kinesthetic Realism**: A hand holding a stylus interacting with a 3D object.
- Perception of Depth**: A 3D object shown from multiple perspectives to illustrate depth.
- Ability to Look Around**: A 3D object with a red arrow indicating the user's view can rotate around it.

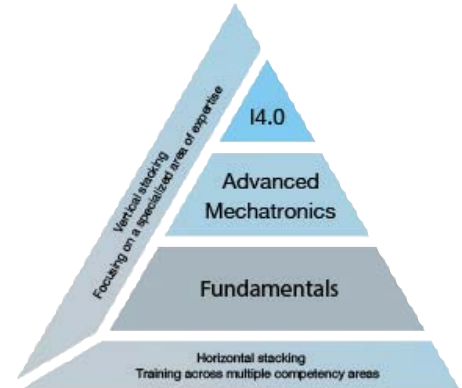


LEARNING THAT WORKS. SM

Industry 4.0 Certification Program

Industry 4.0 Certification Program

The Festo Industry 4.0 Certification Program is a comprehensive certification that ensures students have the qualifying skills upon completion. NC3 implements and sustains in-demand, portable, industry-recognized certifications built on national skill standards. Their Train-the-Trainer program is an important step toward enabling instructors from partner schools to implement and teach courses at their local school and certifies all instructors are delivering same level of qualification.



FI4.0CP is a comprehensive certification program developed by industry experts and educators that ensures students have qualifying skills upon graduation, including soft skills such as effective communication, managing others and critical thinking. **FI4.0CP is easily integrated with existing certificate, associate's and bachelor's degree programs, and offers three levels of certification.**



Level One | Fundamentals | Level Two | Mechatronics Level Three | Industry 4.0

Current Festo NC3 Industry 4.0 Certifications
STEM Lab Certifications
Introduction to Mechatronics

Fundamentals of PLCs - Allen Bradley/Siemens
Certified Industry 4.0 Associate -
Fundamentals

Level 1 Fundamental Certifications
Fundamentals of Industry 4.0
Fundamentals of Fluid Power - Hydraulics
Fundamentals of Fluid Power - Pneumatics
Fundamentals of Electricity - AC/DC
Fundamentals of Robotics
Fundamentals of Mechanical Systems
Fundamentals of Sensor Technology

Level 2 Advanced Mechatronics Certifications
Applied Robotics
Applied Fluid Power - Maintenance & Troubleshooting
Applied Fluid Power - Vacuum Technology
Applied Product ID Fundamentals
Applied Industry 4.0
Applied PLC Technology II: Allen Bradley/Siemens



NIMS



The National Institute for Metalworking Skills (NIMS) is a national organization that creates industry-developed competency-based skill standards, credentials and training frameworks to increase the skills of the advanced manufacturing workforce. These standards continue to be the basis used by industry for recruiting, hiring, placement and promotion, and by training and educational institutions as performance measures. As a part of Festo Didactic's commitment to building tomorrow's workforce, we have worked closely with NIMS to enhance our products and courseware.

SIEMENS

Siemens Mechatronic Systems Certification Program

Siemens Mechatronic Systems Certification Program

Through the SMSCP partnership, Festo supports students, instructors, and learning institutions, addressing the talent shortage as the manufacturing industry quickly evolves. By receiving training and mentorship directly from Industry 4.0 professionals, students learn from a curriculum set aligned and up to speed with industry advancements.



NC3 - National Coalition of Certification Centers

NC3 implements and sustains in-demand, portable, industry-recognized certifications built on national skill standards. Their Train-the-Trainer program is an important step toward enabling instructors from partner schools to implement and teach courses at their local school and certifies all instructors are delivering same level of qualification. The Festo Industry 4.0 Certification Program is a comprehensive certification that ensures students have the qualifying skills upon completion.



MIND SIGHT - LMS (LEARNING MANAgEMENT SYSTEM)

Festo's web based Mind-Sight program is a state of the art, ISP delivered, SCORM compliant curriculum delivery and lab management system. The feature rich system offers the very latest in E Learning curriculum today.

my eCampus

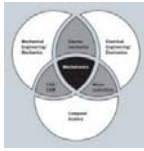
my|e CAMPUS

Festo my|eCampus offers interesting training programs in automation, technology and mechatronics featuring didactically sound, media based learning.



INDUSTRIAL TRAINING ZONE

The Industrial Training Zone (ITZ) eSeries Courses deliver a broad range of fundamental and specialty industrial training courses. The ITZ eSeries Courses offer all the important content in the appropriate context, comprehensive assessments, and the latest tools to evaluate performance. With seamless integration intoMindSight, the ITZ eSeries Courses provide a multitude of ways to fulfil industrial training needs.



FESTO MECHATRONICS CERTIFICATION



**FESTO AUTHORIZED & CERTIFIED
TRAINING CENTER**



**NATIONAL CENTER FOR CONSTRUCTION
CERTIFICATION & RESEARCH (NCCER)**



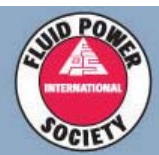
**ETA – INTERNATIONAL
ELECTRONICS TECHNICIANS ASSOCIATION**



**NORTH AMERICAN BOARD OF CERTIFIED
ENERGY PRACTITIONERS (NABCEP)**



COMPTIA



**INTERNATIONAL FLUID POWER
SOCIETY (IFPS)**



**INTERNATIONAL GROUND SOURCE
HEAT PUMP ASSOCIATION (IGSHPA)**



**NATIONAL COMMISSION FOR CERTIFICATION
OF CRANE OPERATORS**



PROVIDING HIGH QUALITY PRODUCTS & SERVICES SINCE 1964

PLEASE GIVE US A CALL AND LEARN ABOUT THE NATION'S
LEADER IN TECHNICAL TRAINING CURRICULUM AND EQUIPMENT.



**ADVANCED
TECHNOLOGIES
CONSULTANTS, INC**

**Corporate office:
110 West Main Street,
Northville, MI 48167**

**Phone: 248-348-8447
Fax: 248-348-3040
Website: www.atctrain.com**

