

Bid – 24-04: Professional and Managed Technical Services for Innovative Networking & Cybersecurity Curriculum for High School Students

Oxford City Schools Contact Information

Director of STEM, Research, and Innovation: Sherita Hayes shayes@oxboe.com

Bid Due Date is **September 3, 2024, 2:00 P.M CST**

Introduction

Oxford City Schools is seeking proposals from qualified cybersecurity and networking professionals to provide comprehensive training and managed technical services for an innovative networking & cybersecurity program for high school students. The goal is to equip teachers with the knowledge and skills needed to develop and implement a curriculum that certifies high school students in IT fundamentals, networking infrastructure, cybersecurity, and prepare students for integration of artificial intelligence systems. Additionally, the selected professional and his/her affiliate will be responsible for setting up and managing an internal, standalone network for hands-on student experiences without compromising the school system’s network. The program will be housed at the Choccolocco Research, Education, and Technical Experience (CREATE) center in Oxford, AL. CREATE is a regional education, workforce development, and technology center that will better prepare students for postsecondary careers and workforce opportunities.

Sealed bids, subject to conditions contained herein and attached hereto, will be received at the Oxford City Schools, until, but not later than 2:00 p.m. CST, September 3, 2024, and then opened and publicly read. Bids may be mailed to the attention of Sherita Hayes, Bid – 24-04, Oxford City Schools, 402 Main Street, Oxford, Alabama, 36203 or hand delivered at the bid opening.

Timeframe

RFP Release	August 16, 2024
CREATE Facilities Walkthrough (Optional)	August 27, 2024, 9:00 A.M. CST 1 Cliff Garrett Dr, Oxford, AL 36203
Deadline to Submit Questions	August 28, 2024 3:00 P.M. CST
Bid Submission Due	September 3, 2024 2:00 P.M. CST
Bid Awarded	Upon Board Approval
Commencement of Services	January 6, 2025 - March 31, 2025

Terms

- This project is subject to finite funding and is contingent upon the availability of financial resources. Oxford City Schools reserves the right to terminate the contract, in whole or in part, at any time, if sufficient funds are not available to meet the project requirements. In the event of such termination, the contractor will be compensated only for services and deliverables completed and accepted up to the date of termination, subject to the maximum limit of the allocated budget.

- By submitting a proposal, the vendor acknowledges and accepts these terms and conditions regarding the finite funding and potential for contract termination due to unavailable funds.
- Oxford City Schools reserves the right to accept and/or deny any or all items on the bid at the unit price submitted.
- All prices submitted on the bid are to be “delivered prices” and shall be inclusive of all charges, and fees, and shall not include any state or local tax. Tax exempt information is available upon request.
- The Oxford City Schools’ Director of STEM, Research, and Innovation shall be notified immediately regarding any price decrease affecting a bid item. Furthermore, Oxford City Schools shall receive the benefit of the decrease as soon as possible in accordance with the written notification from the contract vendor.
- No invoice will be paid until all purchase order items and services have been accepted and delivered to the school district’s satisfaction.
- This contract expires September 30, 2027. It may be renewed at the agreement of both parties for two additional years or up to the maximum amount of time provided by the laws of the State of Alabama.
- Oxford City Schools System reserves the right to cancel the contract with the vendor for non-performance.
- Do not alter this document other than to respond.

Scope of Work:

The selected professional will be responsible for the following:

1. Training Program Development:

- Design a comprehensive training program for high school teachers.
- Include modules on IT fundamentals, networking infrastructure, cybersecurity, and integration of artificial intelligence.
- Develop hands-on lab exercises and real-world scenarios to enhance learning.

2. Training Delivery:

- Conduct in-person and/or virtual training sessions to include monthly check-ins.
- Prior to training sessions provide a "curriculum guide" or detailed agenda for the purpose of building prior knowledge on technical terminology that will be used in training and instructional resources.
- Provide instructional resources for teachers.
- Offer support and guidance during the initial implementation phase.

3. Curriculum Development Assistance:

- Assist teachers in creating a curriculum that aligns with industry standards and certification requirements.
- Provide lesson outlines and recommend assessment tools.
- Ensure the curriculum prepares students for relevant certifications.
- Share plans with **Alabama School of Cyber Technology and Engineering (ASCTE)** for feedback on application in a high school environment.

4. Certification Preparation:

- Guide teachers on how to prepare students for certification exams in IT fundamentals, networking infrastructure, and cybersecurity.
- Provide and/or recommend study materials, practice exams, and other resources.

5. Infrastructure Setup:

- Provide and set up servers and switches to create a secure, standalone internal network.
- Ensure the network allows students to engage in hands-on practice without compromising the school systems network.
- Develop guidelines for submitting help tickets for maintaining and troubleshooting the network.

6. Installation and Deliver:

- Schedule the installation and delivery dates with the Director of STEM, Research, and Innovation. The delivery and installation will be completed around the school day schedule.

7. Ongoing Support:

- Offer ongoing support and professional development opportunities for teachers.
- Stay updated with the latest industry trends and incorporate them into the training, curriculum, and network setup.
- Provide ongoing support, management, maintenance and troubleshooting of the internal, standalone network infrastructure.

8. Timeline for Commencement of Services

- Delivery and installation of network equipment and initial training sessions should begin as early as January 6, 2025 and no later than March 31, 2025.

Internal, Standalone Network Infrastructure Technical Specifications:

The network setup should include equipment with specifications matching the following or its equivalent:

1. Switches:

- Brocade ICX 7750:
 - High-performance, stackable switch with advanced Layer 2 and Layer 3 features.
 - 10GbE and 40GbE connectivity.
 - Up to 96 10GbE ports or 32 40GbE ports per switch.
 - Hot-swappable power supplies and fans.
 - Advanced security features and Quality of Service (QoS) capabilities.
- Cisco 3650:
 - Enterprise-class stackable access switch.
 - 24 or 48 Gigabit Ethernet ports with PoE+ options.
 - Modular uplinks with 1GbE, 10GbE, and 40GbE options.
 - Integrated wireless controller capability with up to 40 Gbps of wireless throughput.
 - Enhanced security with TrustSec and Flexible NetFlow.
- Arista 7050SX:
 - High-density, low-latency 10GbE/40GbE switch.
 - Up to 64 10GbE SFP+ ports or 48 10GbE and 4 40GbE QSFP+ ports.
 - Wire-speed Layer 2 and Layer 3 forwarding.
 - Advanced EOS (Extensible Operating System) for programmability.
 - Low power consumption and front-to-back airflow.

2. Servers:

- Dell R620:
 - 1U rack server with dual Intel Xeon E5-2600 series processors.
 - Up to 768GB of DDR3 memory.
 - Flexible storage options with up to ten 2.5" drives.
 - Redundant power supplies and hot-swappable components.
 - Integrated iDRAC7 with Lifecycle Controller for simplified management.

Equivalency:

All items must be of equal or greater specification regarding the listed items above. No consideration is to be implied regarding the manufacturer or model as all quotes will be considered equally in accordance to the bid requirements. Therefore, any use of trade names and product numbers shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition since equivalent equipment and services will be considered.

Qualifications:

The ideal candidate will possess the following qualifications:

- Proven experience in cybersecurity, networking, and integration of artificial intelligence systems.
- Experience in training and training development.
- Experience in designing and developing innovative technological solutions.
- Strong communication and presentation skills.
- Relevant certifications in IT, networking, and cybersecurity.
- Experience in setting up and managing standalone networks.
- Experience working with educators and/or in an educational setting is preferred.

Proposal Requirements:

Interested professionals are requested to submit a proposal that includes:

1. Cover Letter:

- Brief introduction and summary of your qualifications.
- Include experience with cybersecurity, networking, and artificial intelligence systems and developing innovative technological solutions.

2. Detailed Proposal:

- Outline of the proposed training program, infrastructure equipment, and infrastructure setup.
- Description of the training methods and materials.
- Plan for setting up the standalone network.
- Timeline for development and delivery of the training and network setup.
- Cost breakdown for equipment and services, including billing cycle.

3. References:

- Contact information for at least three professional references.
- Examples of previous similar projects.

4. Supporting Documents:

- Copies of relevant certifications.

- Sample training materials or curriculum outlines (if available).

Contact Person

Send all questions and inquiries regarding this bid to Sherita Hayes at shayes@oxboe.com.

Evaluation:

The following table will be used to evaluate all bids:

Factor	Weight
Cost of Services and Products	40%
Personnel Qualifications\Experience in Cybersecurity, Networking, and Artificial Intelligence Systems	30%
Vendor Experience with Developing Innovative Technology Solutions	20%
Vendor Support Proximity to Oxford City Schools	10%
Total	100%

Summary

It is the responsibility of the bidder to submit a bid that best meets the requirements outlined in this bid. The proposer may elect to include information not requested and the content of the bid shall be at the discretion of the Bidder. It is the intent of the school system to award a contract for qualified cybersecurity and networking professionals to provide comprehensive training and managed technical services for an innovative networking & cybersecurity program for high school students. The goal is to equip teachers with the knowledge and skills needed to develop and implement a curriculum that certifies high school students in IT fundamentals, networking infrastructure, cybersecurity, and prepare students for integration of artificial intelligence systems.

Name of Firm

Mailing Address

City, State, Zip Code

Signature

Date

Telephone

Email

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Pricing Summary

Description	Quantity	Billing Cycle	Cost Per Cycle	Total

Additional Items	Please include any missing components that are recommended for a complete installation.		
Description	Quantity	Cost	

Total Year 1 Cost for Professional and Managed Technical Services: _____