



**TULSA**  
INNOVATION LABS



**TULSA  
COMMUNITY  
COLLEGE**

# **CYBER & ANALYTICS SKILLS CENTER**

**Request for Proposals:  
Accelerated Training Program Operator**

**Release Date:  
October 18, 2021**

**Submission Deadline:  
December 15, 2021**

# RFP AT A GLANCE

## Scope of Work:

This RFP seeks proposals to operate the Accelerated Training Program for Cyber & Analytics

## Proposal Requirements:

1. Qualifications and Prior Experience
2. Accelerated Training Program Proposal (Please note DEI components of the proposal requirements)
3. Budget

## How to Submit:

E-mail proposal in a single PDF format to Conor Godfrey at:

[conor@tulsainnovationlabs.com](mailto:conor@tulsainnovationlabs.com)

by December 15, 2021, at 5 p.m. CST.

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# I. EXECUTIVE SUMMARY

## A. Context

The demand for cybersecurity and data analytics talent is at a record high, with the U.S. Bureau of Labor Statistics predicting 31% growth in cyber jobs by 2029, a much faster rate than similar industries. This need is even more evident in Tulsa, with 592 unfilled jobs in cybersecurity, which is 23% of the state's workforce need in cyber. TIL's strategic plan, conducted with analytical support from McKinsey & Company, showed that cybersecurity and data analytics have significant potential for catalyzing inclusive economic development in Tulsa.

Tulsa Community College and OSU-Tulsa, in partnership with Tulsa Innovation Labs (an LLC of the George Kaiser Family Foundation), is proposing a Cyber and Analytics Skills Center (CAC) to address critical workforce shortages in cybersecurity and data analytics and create opportunities for all Tulsans to thrive in the tech economy. This program was initially recommended in the "Tulsa's Tech Niche" report, and has been further developed based on market studies and conversations with industry.

Project sponsors also believe that the CAC can and must advance diversity, equity, and inclusion (DEI) in these high growth sectors.

## DEFINITIONS

**cy·ber** /'sī·bər/ noun

"Cyber" is an interdisciplinary field that spans multiple industries and reaches farther than cybersecurity alone. Cyber integrates the elements necessary to build and sustain digital infrastructure, which can include security, privacy, data and recovery, identity and access management, and cloud operations. Security is a cornerstone of cyber and often the most easily recognizable component, but the practice also integrates elements of computer science, engineering, and information technology.

**an·a·lyt·ics** / an-l·'it·iks / noun

"Analytics" is a cross cutting skill set that encompasses, but is not limited to, mathematics, data science, data visualization, statistical programming, and other forms of data-driven analysis.

# The CAC consists of three phases.

## Phase 1

In Phase 1, the exclusive focus of this RFP, the CAC will offer an accelerated training program with both a cyber & analytics track to rapidly upskill students and career-changers and prepare them for in-demand jobs in cyber and analytics in Tulsa.

## Phase 2

In Phase 2, an Associate-to-Bachelor's pathway between TCC and OSU will create highly-skilled cyber and analytics professionals.

To ensure the success of this initiative, these educational offerings will be paired with top-tier wraparound services that will increase accessibility, ensure retention, and assist with job placement upon graduation.

## Phase 3

At maturity or "Phase 3", this suite of programs will be housed on OSU-Tulsa's campus following a renovation of the 1300 Wing of Main Hall.

At scale, the training program portion of the CAC will graduate ~100 bootcamp students and ~100 bachelor's degree students per year.

**This RFP seeks proposals to operate the Accelerated Training Program for Cyber & Analytics envisioned in Phase 1.**

Proposals will be jointly evaluated by:



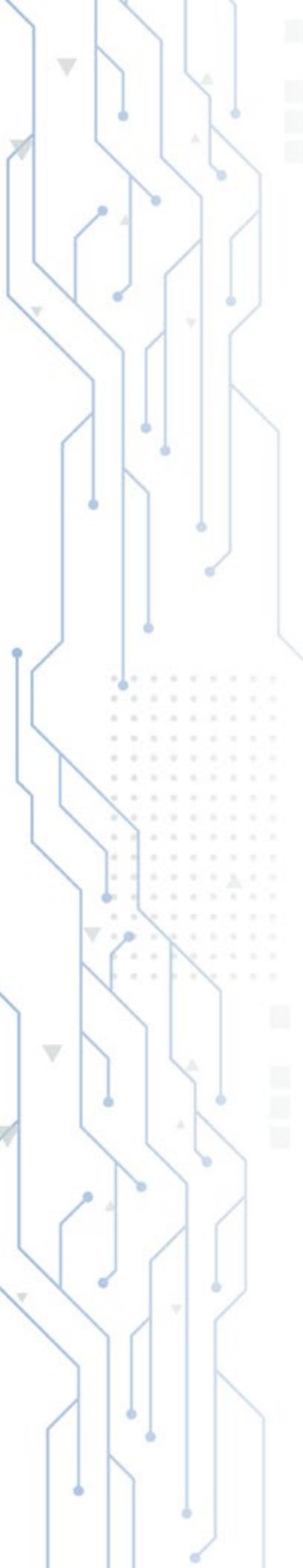
**TULSA**



As well as local industry representatives.

Key evaluation criteria will include;

1. Respondent's experience in successfully operating accelerated training or comparable programs;
2. Strength of the overall budget to include proposals for placement-based pay and cost sharing with the host institution;
3. Strategy and track record recruiting, training, and placing diverse candidates, and;
4. Strategy for ensuring industry alignment, appropriate credentialing, and job placement.



Project sponsors are open to a wide variety of ideas, models, and partnerships to ensure industry alignment (nationally and inside the Tulsa region), and to de-risk the hiring process for employers. Respondents are encouraged to offer innovative solutions to these issues, and/or to submit joint proposals with organizations whose expertise, business model, and/or tools address these concerns. Tulsa Innovation Labs – an LLC of the George Kaiser Family Foundation – is ready to make strategic, philanthropic investments with the operator and other projects sponsors to ensure success in Tulsa.

Selecting an operator will serve as the first step in the creation of the CAC, to be followed soon thereafter by TCC recruiting an executive director and key support staff to ensure program oversight and to build out phase two and three of the CAC.

## B. Request for Proposal

**This RFP seeks an operator(s) for a 12-18 week full-time accelerated training program (24-36 week part-time) with two parallel tracks.** Each track would enroll approximately 50 students per year, for a total of 100 CAC students total, and the contract would be valid for three years pending satisfactory performance.

### Track 1 – Cyber

This is for career changers with at least two years of professional experience looking to advance their careers in cyber fields. Students going through this program will likely already have an associate's or bachelor's degree but are looking for specific technical cybersecurity training. Graduates of the program should be able to successfully complete specialized cybersecurity certifications and find a permanent job within the Tulsa region. This could be through employment with a regional employer or as a remote worker based in Tulsa.

Strong proposals will discuss how to align curricula with relevant industry skills and certifications as well as workforce trends in the regional and national economy. Proposals should include strategies, tools, and/or partners with proven track records of securing employment. Successful respondents will also make clear commitments to the inclusion and success of diverse students. While not required, the use of a learning management system compatible with Blackboard (TCC's platform of choice) would facilitate better integration with TCC.

### Expected Outcome:

Based on the productivity of similar training programs across the nation, TCC, OSU, and TIL hope to achieve a 90% graduation rate with 85-95% job placement within 6-months, and 70% job placement rate in Tulsa either through a regional employer or as a remote worker based in Tulsa. Sponsors look forward to discussing these terms in more detail with respondents.

### Track 2 – Analytics

This track will cater to people already working in entry or mid-level analytics jobs who want the skills to take their careers to the next level. The program could be used to train workers who have relevant experience but are not up to date with new programs, software, or techniques.

## C. Sponsoring Organizations



### **Role & Responsibilities vis-a-vis Accelerated Training Program:**

Tulsa Community College (TCC) will host the Accelerated Training program on campus and is primarily responsible for its oversight. While the respondent is accountable for developing and deploying the curriculum and meeting key performance indicators, TCC faculty, career services, marketing, and other services will work synergistically with the operator to ensure program success.



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## **TULSA**

### **Role & Responsibilities vis-a-vis Accelerated Training Program:**

Oklahoma State University has no direct role in the accelerated training program envisioned as CAC Phase 1. During Phase 2 & 3, OSU will work with TCC to offer a 4-year degree pathway for accelerated training program graduates, and eventually to renovate space at OSU in which to house the entire CAC at maturity.



### **Role & Responsibilities vis-a-vis Accelerated Training Program:**

Tulsa innovation Labs is an LLC of the George Kaiser Family Foundation, and will provide strategic advisory services as well as evaluate co-investment opportunities to ensure the success of the accelerated training program and the broader CAC. This might include, but is not limited to, assistance for students from historically disadvantaged backgrounds, funding enabling services, and/or capital investments. TIL will also help facilitate corporate or other industry partnerships.

## CENTERING DIVERSITY IN TULSA'S TECH-LED EXPANSION

Tulsa puts diversity, equity, and inclusion at the core of the city's push for tech-led economic development. In an effort to honor and advance the legacy of Black Wall Street, Tulsa hosts a number of initiatives designed to ensure that diverse Tulsans lead and benefit from the city's tech-led growth. These include, TedC Creative Capital, Black Tech Street, ACT Tulsa, & Build In Tulsa among others. In this spirit, the ability to recruit and retain diverse talent for the CAC is an important criteria in evaluating RFP respondents.





## **D. Introduction to Tulsa's Broader Cyber & Analytics Ecosystem**

Tulsa's growing tech ecosystem will require significantly more cyber & analytics professionals to service high growth companies and to thrive in the new economy. Many academic, philanthropic, and commercial partners are helping to upskill and attract talent.

### **UNIVERSITY OF TULSA**

The University of Tulsa (TU) is the region's premier academic institution for cyber studies, and offers a fully online professional Master's degree in Cyber Security. It caters to working professionals as well as full-time graduate students. There are plans to substantially increase TU's cyber degree offerings in the coming years.

### **TU-TEAM8 CYBER FELLOWS**

TU-Team8 Cyber Fellows, sponsored by the George Kaiser Family Foundation and the University of Tulsa, in partnership with Team8, a venture capital company, provides stipends and tuitions for 10 doctoral students in STEM degree programs. The collaborative mentorship directs the students' research toward commercialization and industrial solutions with immediate application.

### **INNOVATION ACCELERATOR FOUNDATION**

The University of Tulsa and Tulsa Innovation Labs will be working with Innovation Accelerator Foundation (IAF) on a cyber-focused research consortium initiative in conjunction with the U.S. Department of Defense and nationally-renowned research universities.

### **CYBER CITY**

The new Cyber City initiative, funded by the George Kaiser Family Foundation in coordination with the University of Tulsa, provides cyber training to K-12 teachers.

### **CRITICAL INFRASTRUCTURE RESILIENCE INSTITUTE**



In 2020, TU joined a coalition of universities as part of the Critical Infrastructure Resilience Institute that includes the University of Illinois Urbana-Champaign, Purdue University, and Auburn University established by the Department of Homeland Security to develop an academic hub-and-spoke model for a network that educates and trains cybersecurity professionals.

## **HOLBERTON ACADEMY**

A software engineering academy offering 12 and 20 month programs in computer science and a variety of in-demand specializations.

## **CYBER-RELATED STARTUPS AND COMPANIES**

Tulsa has multiple cyber-related startups and companies, including True Digital Security, EdgeStack, and Cytek that focus on cybersecurity solutions in domains including network protection, vulnerability management, and encryption.

## **LARGE LOCAL CORPORATIONS**

Large local corporations are major users of cyber services and technologies, including Bank of Oklahoma, QuikTrip, Williams, Humana, and Helmerich & Payne.

## **TULSA TECHNOLOGY CENTER**

Tulsa Tech serves students from local area high schools as well as adults in Cyber Security/Forensics via an 18-month/2-year program at the Tulsa Tech Riverside Campus in Jenks, OK.

## **TULSA REGIONAL STEM ALLIANCE**

The Tulsa Regional STEM Alliance is a local non-profit organization building broad, deep and innovative STEM pathways for all students in the Tulsa region to access high-impact careers through an abundance of diverse STEM related activities, resources, and support for K-12 teachers. Events such as Code.org Fundamentals, SCRIPT Facilitator Workshops for school districts and the High School Quantum Computing Class sponsored by IBM Quantum are examples of ways TRSA connects with school district teachers and students.

## II. CONCEPT FOR CYBER & ANALYTIC SKILLS CENTER (AT PHASE THREE MATURITY)

### A. Overview: The Accelerated Training Program is part of a broader vision for the CAC.



#### Mission:

The CAC recruits and trains qualified, diverse cyber and data science professionals and connects them directly to current and future employers in the Tulsa region.



#### Vision:

CAC is the lynchpin of Tulsa's tech workforce development, working in parallel with other partners to rapidly close the tech skills gap in Tulsa and begin to create a talent pool for Tulsa based startups, existing corporates, and new, high growth businesses relocating to Tulsa.

#### KEY OBJECTIVES AT MATURITY:

1. Create a streamlined pipeline from high school through a Bachelor's degree in Cybersecurity and Data Analytics/Data Science (K-12 à TCC à OSU-Tulsa)

### Subject of this RFP

2. Upskill and reskill workers currently in the workforce, especially professionals looking to pursue mid-level cybersecurity and analytics positions.
3. Offer supportive services for students to increase access to STEM education in Tulsa and increase retention/graduation from STEM academic programs for low-income students, women, and students of color.
4. Create incentives and community connections with students to increase their "stickiness" or likelihood to pursue career options in Tulsa. This could include, but would not be limited to internships and other career development support, as well as participation in university research projects.

## B. Goals and Key Performance Indicators (KPIs)

**PROJECT SPONSORS  
EXPECT A PORTION  
OF OPERATOR  
COMPENSATION TIED  
TO MEETING  
DEFINED KPIs.**

### RECRUITMENT AND GRADUATION

- Recruit approximately **50** qualified students per year into the Cyber & Analytics tracks respectively, for a total of **300** students over three years.
- Based on the productivity of similar training programs across the nation, project sponsors expect to achieve a **90%** graduation rate in each track.
- In the Cyber track, **95%** of graduates should successfully pass the industry certification exams specified in respondents' proposals.

### RETENTION AND PLACEMENT

- Successfully place **85-95%** of students in paying, career advancing jobs within **6 months** of graduation.
- **70%** of job placements should be in Tulsa. This includes students who live in Tulsa but work remotely for companies out-of-state, and students who find employment with regional businesses.

### DIVERSITY, EQUITY, AND INCLUSION

- No less than **40%** of students should identify as female.
- No less than **30%** of students should identify as people of color.
- Specific effort should be made to promote program visibility and recruitment in Tulsa's historically marginalized communities; this includes, but would not be limited to, Tulsans identifying as Black, Hispanic, and/or Native American.

**Program Sponsors are open to a variety of models that meet core objectives.**

**This might include, but is not limited to:**

- Different revenue sharing models with partner institutions
- Innovative partnerships with industry or workforce development organizations.

## **III. SCOPE OF WORK** (OPERATOR)

### **A. Scope of Work**

#### **CURRICULUM DEVELOPMENT**

- Propose industry-aligned curricula for both Cyber and Analytics tracks that prepare students to pass industry relevant certification exams and/or secure permanent positions in the field. This should include some level of job skills & interview training. Project sponsors would look favorably on customizable curricula options.
- For the Cyber track, propose specific industry certifications achievable within the allotted time and most relevant to mid-level professionals. See Annex for Tulsa specific data on job openings.
- For the Analytics track, propose curricula that addresses tools relevant to a broad swath of mid-level data science and analytics jobs.
- Consider building in badges, micro-credentials, and/or other forms of industry relevant credentialing.
- Take into account Tulsa regional specialties and emerging industries such as energy, aviation, virtual health, etc...as well as current and emerging employment trends. Work with local industry to ensure that graduating students are qualified for roles in their organizations.
- Prepare to deliver curriculum via in person, online, or hybrid model.

#### **STUDENT RECRUITMENT**

- Recruit approximately fifty students per year for each track.
- Create an application process that is optimal for student success as well as diversity, equity and inclusion.
- Work with TCC and OSU to improve brand strength and visibility among potential student recruits and employers.

## RETENTION AND PLACEMENT

- Successfully graduate and place 90% of students in paying, career advancing jobs within 6 months of graduation.
- Leverage national employer networks to source opportunities for remote work opportunities.
- Establish relationships with local employers and workforce development partners to provide opportunities for graduates in the Tulsa region.
- Consider partnering with tech apprenticeship programs and/or workforce development programs to de-risk hiring for employers and ensure graduates' success once employed.

## DIVERSITY, EQUITY, AND INCLUSION

- Recruit students with diverse gender, racial, and economic backgrounds.
- Ensure that instructors come from a diverse set of backgrounds.
- Provide job skills and career coaching to ensure all students, especially those from disadvantaged backgrounds, are prepared to enter and succeed in the workforce.



# Operator responsibilities and support from other actors.

## B. Deliverables

- Four quarterly and one annual report per year describing progress as measured against key performance indicators. This should also include a discussion of any expected or unexpected challenges, forecasting around KPIs for the next quarter/year, and a plan for continuous improvement. Each quarterly report should specifically address students who drop out of the program, even though some attrition is to be expected.
- Perform one industry / market analysis during planning phase to determine employer needs in the Tulsa region. This should be updated annually and cover job openings, skills and/or certifications to fill those openings, and the gap between Tulsa's current labor force and those qualifications.
- Create a small industry advisory council to ensure constant industry feedback on curricula development.
- Maintain updated list of job placements for each training cohort and survey employers 6 months after placement to ascertain employee quality and readiness.
- For each cohort, track demographic information for student applicants and graduates to include, but not limited to: ethnicity, gender, educational background, and whether or not the student is the first generation in their family to attend higher education.
- For each cohort, track highest wage earned before entering program and the wage earned for their first professional placement post-graduation. If possible, the average duration of employment with first post-graduation employer could also be tracked.



# IV. SUBMISSION REQUIREMENTS

We strongly encourage respondents to be creative in their proposals and to bring us unique approaches and ideas that meet our minimum objectives, showcase their expertise, and inspire us to think big.

TIL and TCC are not liable for any costs incurred in the development of the respondent's RFP proposal. All submitted proposals become the property of TIL and TCC.

Each respondent will provide a complete and detailed proposal that is to include the following:

## A. Qualifications and Prior Experience

### 1. Respondent Information

- List the Primary Respondent(s) including name, title, address, phone number, and email address. Detail whether the respondent is a single entity or group of individuals.
- Include a summary of the organizational history of the respondent.
- The above information for any associated respondents and detailed information about their role in the project.
- *(Optional)* Include any available DEI metrics for respondent's core staff.

### 2. Relevant Experience

- Describe previous experiences executing similar skills centers, bootcamps, or comparable programs. Where relevant include graduation and job placement rates for any prior programs. Also include the average cost per enrollment for any prior skills center or bootcamp operation in which the respondent was responsible for marketing, recruitment, and enrollment. Include other data as relevant, including data related to the diversity profile of incoming and/or graduating students.
- Make special note of any history with cyber generally, and/or cyber security and/or analytics in particular.
- References:
  - Include at least three (3) but no more than five (5) professional references that can attest to the respondent's capability in operating a skills center or technology bootcamp. These references must be affiliated with the prior projects listed.
  - One of these references should come from an employer who can speak to the process of interfacing with the operator and/or the quality of the graduates.
  - Project sponsors would look favorably on one reference affiliated with an educational institution.
  - Each reference should include a name, title, affiliation, organization, phone number, and email address.

## B. Accelerated Training Program Proposal (i.e. Phase 1 of Cyber & Analytics Skills Center)

- Provide in full detail the respondent's outline and approach for developing and operating the two track training Program detailed in Phase 1 of the Cyber and Analytics Skills Center.
- See Scope of Work section for insight into requirements and to identify other areas that would be valuable to consider.
- Include the following:
  - Program Timeline
  - Description of model curricula for both Cyber and Analytics Tracks.
  - Approach to credentialing, including but not limited to any industry relevant certifications students would acquire as part of the program.
  - Identify how these skills and credentials map to in-demand jobs in the Tulsa region and beyond.
  - Strategy for student recruitment and marketing to meet numeric and diversity KPIs.
  - Strategy for ensuring job placement, including any key partnerships.
  - Project success metrics if not captured by RFP KPIs.

## C. Budget

- Using the aforementioned key components of the respondent's proposal outline, describe a line-item budget that the respondent will need to accomplish all items in the consulting engagement.
- Include operational costs for consultant, travel, supplies, and other elements specific to the buildout of your strategic plan.
- Include proposed revenue sharing model with partners and an explanation of the factors that influence this component of the proposal.

# REVENUE SHARING EXPECTATIONS AND ROLE OF TULSA INNOVATION LABS:

Project sponsors expect that at maturity the training program will be, at minimum, cost neutral to TCC while maintaining operator profitability. Respondents may identify in the budget where Tulsa Innovation Labs could make strategic investments to ensure program success.

# V. RESPONDENT PROFILE AND EXPECTATIONS

## A. Respondent Profile

The respondent(s) may be, but are not limited to, public or private corporations as well as not-for-profit organizations. Specific industry or academic knowledge of cyber or analytics is not required but is strongly encouraged. Experience partnering with 2 and/or 4-year educational institutions also a strong asset.

The respondent must be able to meet all the requirements outlined in the scope of work. The respondents must be available for continual open communication with TIL and TCC by email and phone. Given the ongoing COVID-19 public health emergency, we anticipate the majority of these discussions to be completed remotely.

Diversity and inclusion are core values for the sponsoring organizations. The respondents to the RFP are expected to demonstrate their dedication to diversity, equity, and inclusion in their proposals as well as to propose a team that reflects these values.

## B. How to Submit Proposal

TIL and TCC will hold an information session on Monday, October 25th, which will include an overview of the CAC and the RFP requirements as well as time to answer questions from respondents. If interested in attending this information session, please contact [conor@tulsainnovationlabs.com](mailto:conor@tulsainnovationlabs.com)

Following this presentation, the sponsoring organizations will release an FAQ document based on the questions emailed and asked during the information session.

The contract period for the engagement is intended to begin in Q1 2022.

- **Please email your proposal in a singular PDF to [conor@tulsainnovationlabs.com](mailto:conor@tulsainnovationlabs.com)**
- **Final proposals should be submitted no later than 5 p.m. CST on December 15, 2021**
- Respondents can expect to get a confirmation of receipt email within two business days of submitting their proposal.

A circular graphic with a blue and white color scheme, featuring a stylized circuit board pattern. The text inside the circle reads "Information Session 10/25/21".

**Information  
Session  
10/25/21**

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## C. Selection and Engagement Timeline



## D. Evaluation Criteria

The respondents to the RFP will be evaluated on the following criteria:

### 1. Respondent Experience (25%)

- Organizations experience operating upskilling centers or “bootcamps”
- Strength and experience of respondent core team
- Prior experience working with community colleges and/ or 4-year institutions
- Experience in cyber, analytics, or adjacent disciplines

### 2. Diversity Equity and Inclusion (25%)

- History of recruiting and retaining diverse students
- Diversity of core program team
- Strategy for recruiting and retaining diverse Tulsans

### 3. Proposal and Industry Alignment (25%)

- Creativity of proposal
- Approach to credentialing and certification
- Strength of strategy for placing students in career advancing roles
- Demonstrated links to national and/or regional employers, including through letters of support or joint proposal submission
- Proposed curricula alignment with Tulsa regional industry

### 4. Budget (25%)

- Adequate and reasonable budget
- Strength of revenue sharing model
- Level of performance-based compensation proposed
- Proposed use of philanthropic capital



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