



## Request for Proposals

### Related Technical Instruction for Nondestructive Testing Specialist

Dear Prospective Training Provider,

Thank you for your interest in being considered to deliver training on behalf of Apprenti. In September 2022, Apprenti was awarded a grant from the U.S. Department of Commerce (Good Jobs Challenge) to scale tech apprenticeships across the Aerospace & Aviation and Cloud related ecosystems for a broad range of IT and Cyber roles.

Apprenti is seeking training providers to deliver Related Technical Instruction (RTI) for Nondestructive Testing (NDT) Specialist apprentices. The U.S. Department of Labor registered NDT apprenticeship program consists of a period of RTI along with structured on-the-job training (OJT) with an employer as a 12 month "earn and learn" program for professionals seeking to become NDT Specialists. Upon successful completion of the program, graduates will have achieved NDT Level 2 qualifications as required by NAS410, with the intent to be offered full-time, permanent NDT Specialist positions with their employer.

The purpose of this RFP is to help Apprenti identify Nondestructive Testing Training Providers to deliver the related technical instruction portion of the NDT apprentice program.

**Proposals are due no later than 5:00 pm Pacific Time on Thursday, June 13, 2024.**

Please complete the following sections:

## **A) PROVIDER INFORMATION**

1. Organization legal name:
2. State of incorporation:
3. Organization website:
4. Locations where you can offer training, including virtual:
5. Type of organization:
  - Community college (academic school or department)
  - Community college (non-credit/professional education school or department)
  - University (academic department)
  - University (professional/continuing education unit)
  - Non-profit code academy or bootcamp program
  - Non-profit training institution
  - Commercial code academy or bootcamp
  - Commercial training institution
  - Other (please describe):
6. Point of contact:
7. Please provide some general background information on your organization, its history, and its interest in becoming an Apprenti training provider:

## **B) PROVIDER CAPABILITY**

1. Partnership and Services
  - a. How do you customize your course content offerings to align with specific business needs?
  - b. Are you able to adapt your delivery model to support an accelerated delivery schedule, such as compressing a semester-long course into an accelerated program with 8 hours of instruction and activities per day?
  - c. What is your process for gathering feedback and making improvements to the training program based on the needs and suggestions of clients?

- d. Do you have any experience facilitating hands-on training at external employer locations?
- e. Are you willing to send instructors to an employer facility to complete classroom/lab activities?

## 2. Programs and Learners

- a. If you have been involved in the development or delivery of a nondestructive testing apprenticeship program for a company, please provide specific details about your role and responsibilities in the program.
- b. How are your online courses administered? Do you use a dedicated Learning Management System or other means?
- c. How do you track and report on learner performance and completion through your programs? Both to the learner and the company.
- d. What is your program's grading system?
- e. What is your approach to assessing and evaluating the competency of learners during the training program?
- f. What is your approach to ensuring the safety and well-being of learners during hands-on training activities?
- g. Do learners have access to instructors during self-paced training if they need support, that would be outside of a live virtual classroom?
- h. Can learners get help or schedule one-on-one sessions with instructors for support during self-paced training?
- i. What is your experience with and capacity around students with disabilities?
- j. How do you handle any necessary accommodations or accessibility requirements for learners with disabilities?
- k. To what extent is accessibility built into course materials?
- l. Is there a certification or compliance confirmation process to ensure ADA and WCAG accessibility?

- m. Do you have an experience manager responsible for the students' experience through their learning journey?
- n. What resources are available for students who fall behind or find themselves struggling with the material?
- o. Have your instructors completed training in classroom management and adult learning theory? Please ensure this is included in their résumé/curriculum vitae.
- p. What is your method for identifying qualified instructors?

### 3. Training Locations and Staff

- a. What are your capabilities and resources for facilitating hands-on/lab activities as part of the nondestructive testing training program? Please provide details on the locations, equipment, facilities, and support you can offer to ensure effective and comprehensive hands-on learning experiences for learners.
- b. Can you provide biographies for each of your instructors, including their experience teaching, certifications, and accreditations in the field of nondestructive testing, as well as proof of successful completion of training in classroom management and adult learning styles?
- c. How do you ensure that your instructors stay up-to-date with the latest advancements and best practices in nondestructive testing?

### 4. References and Success Metrics

- a. Can you provide references from clients who have utilized your nondestructive testing training services for apprenticeship programs specifically?
- b. Can you provide references from previous clients who have utilized your nondestructive testing training services?
- c. Can you provide examples of any success stories or case studies where your nondestructive testing training program(s) have led to positive outcomes for an employer?
- d. Can you provide specific success metrics or key performance indicators that you use to measure the performance and success of individuals who

have completed your program(s) and are performing well in nondestructive testing jobs?

## **C) PROVIDER COURSES - CORE & COMMON FOUNDATIONAL KNOWLEDGE**

Please identify which of the following 5 Core & Common courses you can provide. For each course please:

1. Describe your offering
2. Provide detailed learning objectives and topic outlines for each course
3. Specify the course duration
4. Specify the delivery modality/ availability in Online format for remote students
5. Specify the maximum number of students per course
6. List any additional relevant details

### **1.0 Overview of NDT Methods**

The Overview of NDT Methods module provides apprentices with a comprehensive overview of the various NDT methods used in the field. Apprentices will learn about the principles, equipment, procedures, standards, and safety considerations associated with each method. They will also develop skills in interpreting indications and defects, selecting the appropriate method, and effectively communicating NDT findings. This module equips apprentices with the necessary knowledge and skills to perform NDT inspections and contribute to the quality assurance and integrity assessment of materials and components.

1. Describe the principles, advantages, and limitations of commonly used nondestructive testing (NDT) methods, such as Ultrasound, Eddy Current, Radiography (Digital and Film), Magnetic Particle, Dye Penetrant, Visual Inspection, Thermography, Leak Testing, Neutron Radiography, Acoustic Emission, Shearography.
2. Understand the equipment, tools, and techniques used in each NDT method, along with their applications and general procedures.

3. Recognize the relevant industry standards and specifications for each NDT method and their significance in ensuring accurate and reliable testing results.
4. Gain familiarity with the indications, defects, and discontinuities commonly encountered in NDT inspections and their importance in assessing material and component integrity.
5. Develop an awareness of the safety considerations and precautions associated with each NDT method, including radiation safety, chemical handling, and personal protective equipment (PPE) requirements.
6. Understand how the appropriate NDT method is selected based on material, component, and inspection requirements, considering factors influencing method selection.

## **2.0 Math Refresher for NDT**

This course should provide students with a solid foundation in mathematical concepts and skills necessary for NDT. By understanding and applying mathematical principles, students will be better equipped to perform accurate calculations, interpret data, and solve problems encountered in their NDT work. Specifically, the course should help students:

1. Understand the fundamental mathematical concepts relevant to NDT
2. Apply mathematical formulas and equations to NDT calculations
3. Interpret and analyze mathematical data in NDT reports
4. Perform unit conversions and dimensional analysis
5. Develop problem-solving skills using mathematical reasoning
6. Apply statistical concepts to NDT data analysis

## **3.0 Materials & Processes**

This course should provide students with a solid understanding of materials and processes relevant to Non-Destructive Testing. By acquiring knowledge of materials science, manufacturing processes, material selection, and degradation mechanisms, students will be better equipped to perform effective NDT inspections and make informed decisions in their role as NDT specialists. Specifically, the courses should help students:

1. Understand the basic principles of materials science
2. Identify common materials used in NDT
3. Learn about manufacturing processes and their impact on materials
4. Explore the relationship between materials and NDT techniques
5. Understand the importance of material selection in NDT
6. Gain knowledge of material degradation mechanisms

#### **4.0 Technical Writing & Communications for NDT Specialists**

This course should provide students with the necessary technical writing and communication skills to produce accurate and comprehensive reports, maintain proper documentation, effectively communicate with clients, and present information confidently, ultimately enhancing their job performance and contributing to the success of their work.

1. Understand the importance and significance of technical procedure documents, as well as meeting legal and governmental standards in the NDT field.
2. Understand the principles of effective technical writing as a distinct practice from other forms of writing
3. Develop proficiency in writing comprehensive NDT technical reports
4. Master the use of visual aids and graphics
5. Develop the ability to combine disparate pieces of documentation into a single, seamless document, ensuring consistency and coherence.
6. Develop skills in editing and proofreading
7. Understand the importance of document control and versioning in technical writing.
8. Master the art of creating procedure documentation
9. Strengthen presentation skills
10. Enhance client communication skills

#### **5.0 Ethics of NDT**

This course should provide students with a solid foundation in the ethical principles and considerations relevant to NDT. By developing their ethical decision-making skills and understanding their ethical responsibilities, students will be better equipped to navigate

the complex ethical challenges that arise in the field of NDT. Specifically, the course should help students:

1. Understand the fundamental principles of ethics and their application to NDT
2. Identify and analyze ethical dilemmas specific to NDT
3. Develop ethical decision-making skills
4. Understand the ethical responsibilities of NDT professionals
5. Explore the impact of ethical behavior on NDT outcomes
6. Foster a culture of ethical practice in NDT organizations

### **6.0 Aircraft Familiarization**

The Aircraft Familiarization module provides a comprehensive understanding of aircraft components, systems, and operations. Apprentices will learn to identify and describe major aircraft components, understand the principles of flight and aircraft performance, recognize aircraft markings and placards, and gain knowledge of aircraft maintenance procedures and human factors in aircraft operations. This module equips apprentices with the necessary knowledge to effectively work with aircraft in the field of nondestructive testing.

1. Identify and describe the major components of an aircraft and their functions.
2. Understand the basic principles of flight and how they affect aircraft performance.
3. Recognize and interpret aircraft markings, labels, and placards.
4. Understand the importance of aircraft maintenance and inspection procedures.
5. Identify common aircraft materials and their impact on design and maintenance.
6. Demonstrate knowledge of aircraft systems and their integration within the aircraft structure.
7. Understand the importance of human factors in aircraft operations.



## **7.0 Basic Drawings and Type Design**

The Basic Drawings and Type Design module provides apprentices with a comprehensive understanding of technical drawing principles and type design fundamentals. Apprentices will learn to read and interpret engineering drawings, create accurate technical documents, and apply type design principles to ensure clarity and legibility. This module equips apprentices with the necessary skills to effectively communicate and document nondestructive testing procedures and results.

1. Identify and describe the major components of an aircraft and their functions.
2. Understand the basic principles of flight and how they affect aircraft performance.
3. Recognize and interpret aircraft markings, labels, and placards.
4. Understand the importance of aircraft maintenance and inspection procedures.
5. Identify common aircraft materials and their impact on design and maintenance.
6. Demonstrate knowledge of aircraft systems and their integration within the aircraft structure.
7. Understand the importance of human factors in aircraft operations.

## **8.0 Quality Management System**

The Quality Management System module in the Nondestructive Test Apprenticeship Program provides apprentices with a comprehensive understanding of quality management principles and their application in nondestructive testing. Apprentices will learn about the key components of a QMS, industry standards and regulations, quality control and assurance processes, and how to conduct internal audits and implement corrective actions. This module equips apprentices with the necessary knowledge and skills to ensure the highest level of quality in nondestructive testing procedures and deliverables.

1. Understand the principles and concepts of quality management systems (QMS) and their importance in nondestructive testing.
2. Identify and explain the key components of a QMS, including quality policies, procedures, documentation, and performance metrics.

3. Demonstrate knowledge of industry standards and regulations related to quality management in nondestructive testing, such as ISO 9001 and AS9100.
4. Understand the role of quality control and quality assurance in nondestructive testing processes, including inspection, testing, and reporting.
5. Develop skills in conducting internal audits and implementing corrective and preventive actions to ensure continuous improvement in the QMS.
6. Recognize and analyze common quality issues and deviations in nondestructive testing, and propose appropriate corrective actions.

### **Provider Courses – NDT Method Specific**

Please describe your course offerings for the each of these three NDT Methods:

- 1.0 Ultrasonic (UT)
- 2.0 Eddy Current (ET)
- 3.0 Radiography (RT)

For each course please:

1. Describe your offering(s)
2. If you have not already done so, please provide the detailed learning objectives and topic outlines for each course in a word document format
3. Specify the following for each course:
  - a. Duration
  - b. Delivery modality/ availability in online format for remote students
  - c. Number of hours of virtual training and in-person classroom and/or lab training for each course
  - d. If there is in-person classroom training could it be conducted by your instructors at an employer facility
  - e. Maximum number of students per course
4. List any additional relevant details
5. Confirm that your courses are compliant with NAS410 and ASNT CP 105.

## D) ADMINISTRATION QUALIFICATIONS

1. Please describe your higher education, government, or industry accreditation or approval status.
2. Does your organization have approval as an eligible training provider for the Veterans Administration? If not, are you prepared to submit approval paperwork in order to allow veterans to use their GI Bill or Vocational Rehab funding?
3. Are you now, or has your organization ever been, debarred or suspended from state or federal funding awards?
4. Do you offer academic credit for this program or have an articulation agreement with a higher education institution? If yes, please explain further.
5. Do you have any mandatory screening or application procedures that would restrict student eligibility to participate?

## E) CAPACITY PLANNING

1. Do you train on:
  - a fixed schedule only
  - custom delivery only
  - both open enrollment and custom cohorts
2. Must start dates align with particular calendar constraints (e.g., a university academic calendar)?
3. For public/open enrollment coursework, what is the maximum number of apprenticeship students you could include for any given offering?
4. For custom cohorts, what is the minimum notice or lead time required?
5. Are classes available on evenings/weekends or exclusively during normal business hours?
6. How frequently is curricula reviewed and updated?

7. How many concurrent programs can your existing faculty staffing cover if Apprenti were interested in more than one simultaneous training cohort?

## **F) PRICING**

*Apprenti prefers training costs for the delivery of NDT Specialist Related Technical Instruction to be at or below \$9,000 per apprentice.*

1. What is your typical or proposed pricing model? Is it a flat rate per cohort or assessed on a per-student basis?
2. Provide a detailed breakdown of costs for the described program.
3. Must students supply any software or hardware to participate?
4. Are textbooks and other student consumables included?
5. What, if anything, must be supplied by Apprenti or the student other than what is identified above?

## **G) STUDENT OUTCOMES**

1. How many students have enrolled in the program?
2. How many have completed it?
3. Do you have any academic partners who have contributed to or reviewed curriculum development?

## **H) OTHER INFORMATION**

1. Is there any additional information you would like to provide that is not adequately captured by this RFP? If so, please respond below:

## **PROPOSAL REQUIREMENTS**

You must submit the following:

1. This document;
2. Your responses to the questions listed in Sections A through H above;
3. A sample schedule;
4. Your instructor(s) resume/CV;
5. Copy of current business license.

## EVALUATION CRITERIA

| EVALUATION CRITERIA WEIGHT  |
|-----------------------------|
| MISSION ALIGNMENT 5%        |
| CURRICULUM 30%              |
| ADMINISTRATION/DELIVERY 20% |
| CAPACITY/SCALE 15%          |
| PRICING 25%                 |
| OUTCOMES/REPUTATION 5%      |

## TIMELINE

- RFP Issued May 22, 2024
- Proposals Due June 13, 2024 by 5:00pm PDT
- Possible Finalist Interviews Week of June 24, 2024
- Work Begins upon contract execution or as agreed upon by both parties.

## SECTION CRITERIA

- Proposals will be evaluated to determine the training provider(s) best suited to complete the project's scope of work based on the evaluation criteria above.

- Apprenti may choose to interview one or more proposers but reserves the right to choose or to contract with the training provider(s) that best meets the qualifications without conducting any interviews. Apprenti also reserves the right to reject all proposals.
- Apprenti makes no guarantee regarding the number of apprentices who will be placed with any training provider selected pursuant to this RFP.
- Submitting a proposal or being chosen as the most qualified proposal does not guarantee a contract will be executed.

## **SUBMISSION REQUIREMENTS**

- Proposals are due no later than 5:00 pm Pacific Time on Thursday, June 13, 2024. Late submissions will not be accepted or considered. Apprenti assumes no responsibility for formatting or transmission errors.
- Responses must be submitted in MS Word or PDF format by email to Becky Baumann, Commerce Grant Project Manager, at bbaumann@apprenticareers.org. Responses must NOT be mailed.

## **QUESTIONS**

Please direct all RFP related questions to Becky Baumann, Commerce Grant Project Manager, at bbaumann@apprenticareers.org.

Questions received will be published and answered here:

<https://apprenti.notion.site/Questions-Answers-RFP-Nondestructive-Testing-Specialist-Training-Providers-d49dce1fd4d6427283cd54df58438e2c>

## **GENERAL INFORMATION**

Proposers must agree to comply, at a minimum, with the following:

General Requirements

The successful candidate must comply with all the terms and conditions of the Award, including, applicable OMB cost principles, and applicable regulations at 2 CFR part 200 and 13 CFR Chapter III. The contractor must also be eligible to receive EDA assistance.

#### Discrimination Laws

Contractor shall comply with all federal, state, and local nondiscrimination laws, regulations, and policies. Contractor noncompliance with certain anti-discrimination laws may result in canceling the contract.

#### Required Disclosures

Contractor shall disclose any potential or actual conflicts of interest, including but not limited to, any recent business dealings that could be perceived as a conflict, any current or recent state employee working on behalf of Contractor. Contractor shall also certify that it has not been debarred from contracting with the Federal government and shall further disclose if there are any legal actions against it.