

A Collaborative Approach to Expanding Nondestructive Testing Education within a Welding Program
ATE Summary | 2020

BACKGROUND

This project aims to meet the growing need for skilled non-destructive testing technicians in industry by: 1) developing short-term certificates in radiographic testing (RT) and ultrasonic testing (UT) methods; 2) developing a new A.A.S. that includes a strong welding foundation combined with RT and UT methods; 3) acquiring technology to teach and practice digital RT methods; and 4) ensuring all coursework meets the American Society for Non-destructive Testing requirements, which will enable graduates to earn industry recognized credentials.

FUNDER:

National Science Foundation
Advanced Technological Education Program

TIMEFRAME:

2010-2023

AWARD:

\$599,816

EQUIPMENT PURCHASE:

Logos MÓNOS Flat Panel System – A 17” x 14” high resolution imaging system. As opposed to film systems, digital RT systems have built in measuring tools, the ability to zoom in on discontinuities, and the capacity to capture images of materials that traditional film methods cannot. This system will enable students to prepare, shoot (expose), and inspect many more samples during a standard lab section.

PARTNERSHIP:

The Naval Welding Institute will assist in developing coursework that meets ASNT certification requirements. Additionally, they will help develop written procedures for inspections of plate, pipe, and complex geometries, confirm all exams meet ASNT standards, and perform inspections on samples to confirm student practical assessments.

ACADEMIC YEAR 2020/2021 Plans:

- RT course/program development
- UT course/program development
- Developing an NDT advisory committee
- Acquiring a dummy radiographic source

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