

Occupational Endorsement Certificate in Nondestructive Testing Technology

Nondestructive testing technology (NDT) students examine metallic components or weldments to locate and evaluate discontinuities by learning to apply liquid penetrant (PT), magnetic particle (MT), eddy current (ET), radiographic (RT) and ultrasonic (UT) test methods. Student qualification in each NDT method is based on general, specific and practical examinations administered as prescribed in the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A.

This OEC provides foundational skills required for entry into the nondestructive testing industry.

Admission Requirements

Complete the Application and Admission Requirements for Occupational Endorsement Certificates (<http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate/>).

Graduation Requirements

- Complete the General University Requirements for Occupational Endorsement Certificates (<http://catalog.uaa.alaska.edu/undergraduateprograms/oecrequirements/>).
- Complete the Program Requirements below.
- Successfully pass at least two separate industry-recognized welder certifications.

Program Requirements

| Code | Title | Credits |
|--------------|--|-----------|
| MATH A105 | Intermediate Algebra (or any course for which MATH A105 is a prerequisite) | 3 |
| WELD A112 | Shielded Metal Arc Welding (SMAW) | 4 |
| WELD A261 | Ultrasonic Testing | 4 |
| WELD A262 | General Nondestructive Testing | 3 |
| WELD A263 | Radiographic Testing Safety | 2 |
| WELD A264 | Radiographic Testing | 4 |
| Total | | 20 |

A minimum of 20 credits is required for this OEC.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

- Demonstrate hazard assessment and best safety practices.
- Demonstrate entry-level technical skills in welding and nondestructive examination.
- Demonstrate technical knowledge of the interrelationship between metallurgy and inspection processes.
- Demonstrate advanced forms of effective oral and written communication.
- Demonstrate application of advanced mathematical computations as applied in the inspection and nondestructive examination fields.