

ASNT Education

FLEXIBLE LEARNING FOR ALL LEVELS

LEARN AND DEVELOP

Invest in your professional development with ASNT and take your NDT career to the next level.

ASNT offers comprehensive training programs to help NDT professionals at all levels advance their careers. Whether you or your team are seeking to learn new skills, enhance existing ones, or prepare for certifications, we have the right training for you.



ASNT Education

LEVEL I AND II COURSES

Self-paced eLearning courses are perfect for professionals looking to build foundational skills at their own speed. These courses offer flexibility and convenience, allowing you to fit learning into your schedule while meeting SNT-TC-1A requirements*.

LEVEL III COURSES

For more advanced professionals, ASNT offers instructor-led courses that can be attended virtually or in person at our Houston, TX, location. These sessions provide in-depth knowledge and preparation for certification, taught by industry-leading experts.

TRAINING FOR ORGANIZATIONS

We understand that every organization has different training needs. That's why we offer flexible purchasing options, including individual course seats or bulk group licenses. Whether you're training a small team or a large workforce, we have packages to meet your needs:

- » Certification Prep Courses
- » eLearning Courses: Minimum of 10 licenses for bulk purchase
- » Other instructor-led topics

INSTRUCTOR-LED TRAINING AND CERTIFICATION PREP

ASNT's instructor-led classes cater to professionals preparing for certification exams or seeking advanced knowledge. Offerings include Certification Prep Courses, ASNT NDT Level II training, and other advanced topics as needed.

STAY CERTIFIED WITH ASNT

*To meet the training requirements for SNT-TC-1A, CP-189, and NAS-410, learners must complete both the eLearning courses and/or the necessary practical lab/hands-on sessions. A Level III must oversee these sessions to ensure all training hours are accurately fulfilled and documented.

For general information about courses, visit [education.asnt.org](https://www.asnt.org/education) to see course descriptions and schedule of offerings.

ASNT Education eLearning List

ASNT eLearning courses provide the theoretical foundations required for various NDT methods, comprised of self-paced, online modules that include knowledge check quizzes and a final examination. At the successful completion of the eLearning course and final exam, learners will receive a certificate of completion. In conjunction with successful completion of the eLearning course, the learner will also need to complete applicable hands-on, employer-specific training overseen by the responsible Level III to satisfy training requirements set by standards such as SNT-TC-1A, NAS-410, CP-189, and ISO 9712.

Note: Information listed is subject to change. Please refer to education.asnt.org for the most up to date information.

3D Modeling for VT

Contact Hours: **1.5** | Recertification Point Eligible: **Yes**

This course, recommended for VT inspectors, Level IIIs, quality assurance managers, and engineers, explores how 3D modeling enhances precision, efficiency, and confidence in remote visual inspections using modern video borescopes.

Note: this learning module does not meet ANSI/ASNT CP-105 requirements toward SNT-TC-1A or CP-189 certification and includes video excerpts from a 2019 ASNT Annual Conference seminar presented by Charles Janecka of Olympus America Inc. and shared for educational purposes only without endorsement of any referenced OEM equipment.

Eddy Current for Aviation

Contact Hours: **25** | Recertification Point Eligible: **Yes**

This course offers comprehensive training in eddy current technology, tailored for aerospace and aviation applications, covering topics such as basic principles, coil and probe design, phase and modulation analysis, and bolt inspection. It combines theoretical instruction with practical skills, such as discontinuity detection, evaluation against standards, and writing precise reports, aligned with EN4179 and NAS-410 requirements for eddy current inspectors.

Eddy Current Level I: Surface and Tubing Inspections

Contact Hours: **19.5** | Recertification Point Eligible: **No**

This course provides initial and refresher training for Level I eddy current (ECT) technicians, covering essential topics like electromagnetic testing principles, instrument types, and coil designs, based on ANSI/ASNT CP-105 standards and SNT-TC-1A recommendations. The comprehensive curriculum includes 18 modules ranging from basic theories to practical lab exercises, designed to prepare candidates for ECT certification and enhance their qualifications through quizzes and exams.

Eddy Current Level I: Surface Scanning and Aerospace Component Inspection

Contact Hours: **11.5** | Recertification Point Eligible: **No**

This course offers in-depth training on diverse inspection techniques, enhanced by a richly illustrated manual and live demonstrations using systems from several manufacturers. It covers key applications such as surface cracking in various alloys, conductivity measurements, and detection of second-layer corrosion, aligning with the ANSI/ASNT CP-105 body of knowledge and SNT-TC-1A training standards.

Eddy Current Level II: Surface Scanning and Aerospace Component Inspection

Contact Hours: **12** | Recertification Point Eligible: **Yes**

This advanced course builds upon the fundamentals from the Level I eddy current (ECT) course, focusing on surface scanning applications across industries, with specific emphasis on aerospace. It meets the training requirements for Level II ECT technicians and includes lessons, glossaries, and additional reading to aid in exam preparation. Successful completion of the course grants a training certificate, satisfying various industry standards and recommendations for eddy current personnel training.

Ethics and NDT

Contact Hours: **4** | Recertification Point Eligible: **Yes**

This course equips NDT technicians with the ethical knowledge and decision-making skills needed to address real-world challenges in their profession. Learners engage with a dynamic mix of theory, video content, scenarios, and group activities to explore ethical principles in depth. The training emphasizes practical application, helping participants recognize and respond to complex moral dilemmas on the job. By the end of the course, technicians will be better prepared to make informed, ethically sound decisions that support safety, reliability, and professionalism. To extend learning beyond the course, participants receive follow-up content and self-assessments to support long-term behavior change.

ASNT Education eLearning List

Guided Wave Inspection of Pipe Corrosion

Contact Hours: **1.5** | Recertification Point Eligible: **Yes**

This course introduces Level I, II, and III NDT technicians to the principles and applications of guided wave testing (GW), focusing on its ability to detect and measure corrosion in inaccessible pipeline areas such as under insulation or supports.

Note: this module does not meet ANSI/ASNT CP-105 requirements toward SNT-TC-1A or CP-189 certification and features educational video excerpts from a 2019 ASNT Annual Conference presentation by Dr. Brian Pavlakovic and Dr. David Alleyne of Guided Ultrasonics Ltd. with references to OEM equipment included for instructional purposes only.

Introduction to NDT

Contact Hours: **10** | Recertification Point Eligible: **No**

This comprehensive NDT course, taught by industry expert Charles J. Hellier, covers all key NDT methods including visual, penetrant, magnetic particle, radiographic, ultrasonic, and eddy current Testing. It addresses the history and development of NDT, explains the basic principles, techniques, and applications of each method, and emphasizes compliance with certification standards. Designed for a broad audience from design personnel to project managers, the course consists of eight lessons with quizzes, making it ideal for those new to NDT or looking to specialize further.

Course Name: Magnetic Particle Testing Level I/II

Contact Hours: **8** | Recertification Point Eligible: **No**

This course offers an in-depth exploration of magnetic testing (MT), covering the basic principles of magnetism, testing theories, and practical examination techniques using both portable and stationary equipment. It teaches procedures for performing MT, requirements, and how to interpret and evaluate results, catering to those seeking NDT certification or a deeper understanding of MT. The curriculum emphasizes MT's applicability to ferromagnetic materials and its versatility for various part shapes and sizes, aligning with SNT-TC-1A training recommendations.

MT Process Controls

Contact Hours: **1.5** | Recertification Point Eligible: **Yes**

This course is recommended for NDT Level IIIs, MT/PT inspectors, and quality assurance managers seeking to enhance magnetic particle testing (MT) processes through computer-aided systems that improve accuracy, efficiency, and cost-effectiveness—principles that can also be applied across other NDT methods.

Note: this module does not fulfill ANSI/ASNT CP-105 requirements toward SNT-TC-1A or CP-189 certification and includes educational video excerpts from a 2019 ASNT Annual Conference seminar by Wyatt Burns of Magnaflux, with OEM equipment referenced solely for instructional purposes only.

Penetrant Testing Level I/II

Contact Hours: **10** | Recertification Point Eligible: **No**

This course provides detailed training in liquid penetrant testing (PT), a popular NDT method for identifying surface-open defects in nonporous metals. It encompasses eight chapters, covering historical context, capillary actions, safety protocols, application techniques, and quality control, tailored to meet NAS-410, SNT-TC-1A, and NavSea standards for PT certification. The curriculum aligns with ANSI/ASNT CP-105, ensuring comprehensive coverage from theory to practice.

Phased Array 101: Intro to Phased Array

Contact Hours: **6.5** | Recertification Point Eligible: **Yes**

This course discusses the equipment of phased array as well as important considerations in equipment selection. Included is an overview of the physics associated with phased array, the equipment, and its setup, as well as a look at exam execution and data analysis. Additionally, the course discusses the many ways in which results are reported.

Phased Array 102: Qualifications to ASME Code

Contact Hours: **2** | Recertification Point Eligible: **Yes**

With a focus on demonstration and qualification, this course addresses procedures and their content, use, and importance of Scan Plans, as well as workmanship and fracture-mechanics-based examination. Additionally, the course discusses data analysis and review concepts needed to ensure examinations are as required.

Phased Array Level II (80 Hour)

Contact Hours: **80** | Recertification Point Eligible: **Yes**

This comprehensive training course on phased array ultrasonic testing (PAUT) is structured into six detailed sections: ultrasound basics, phased array principles, beam steering, beam focusing, data quality optimization, and a thorough review. Each section combines pages of theoretical explanations, instructional videos, and interactive exercises for hands-on learning in setup building, calibration, scanning, and data evaluation. The course culminates in a final exam that determines student certification, ensuring participants not only understand but can practically apply their knowledge in PAUT.

ASNT Education eLearning List

Radiation Safety/Radiation Safety | Texas

Contact Hours: **23.5** | Recertification Point Eligible: **No**

This course offers a detailed exploration of radiation safety principles for gamma and x-ray industrial radiography, aligned with federal and state regulatory requirements and ANSI/ASNT CP-105 2011 standards. Spanning hours of eLearning and supplemented by employer-sponsored practical training, it provides a comprehensive 40-hour curriculum towards ASNT IRRSP and state radiographer certification exams. Each lesson features quizzes and a final exam to assess understanding, while lesson summaries, glossaries, and a recommended readings list enhance study effectiveness. After this course, additional site-specific training is required to meet federal and state compliance and to prepare participants fully for practical radiography roles.

NOTE: The course content for this course, Radiation Safety, and Radiation Safety Texas course are identical. If a learner is working in Texas, please utilize the Radiation Safety Texas course, as the certificate of completion includes language that is required by the state of Texas. For all other learners who are not conducting business in Texas, please utilize this course, Radiation Safety.

Radiographic Image Interpretation

Contact Hours: **19.5** | Recertification Point Eligible: **Yes**

The Radiographic Image Interpretation course, built on NDT's body of knowledge, thoroughly covers the essentials of radiographic testing. It includes reviews of fundamental concepts, types of discontinuities, real-world image analysis, and relevant codes to prepare students for effective image interpretation. This online course incorporates periodic quizzes and a final examination, with successful completion earning a certificate. Alongside required readings and practical lab sessions, the course fulfills the 40-hour training recommendation of SNT-TC-1A, preparing students for further hands-on experience under professional guidance.

Radiography Testing Level I

Contact Hours: **20.5** | Recertification Point Eligible: **No**

Radiography Testing Level I is an essential foundational course for those pursuing Level I certification in radiography, complying with standards such as NAS-410, SNT-TC-1A, and NavSea Technical Publication T9074-AS-GIB-010/271. The course, conforming to ANSI/ASNT CP-105, spans 21 detailed chapters that cover everything from the history and physics of radiography to safety protocols and regulatory compliance. Designed to be paired with hands-on lab training under higher-level supervision, this program fulfills the required training hours for certification. Upon successful completion, participants receive a certificate, verifying their readiness for professional practice in radiographic testing.

Radiography Testing Level II

Contact Hours: **22** | Recertification Point Eligible: **Yes**

Radiographic Testing Level II is an advanced course designed to meet the training requirements outlined in certification standards such as NAS-410, SNT-TC-1A, and NavSea Technical Publication T9074-AS-GIB-010/271, aligning with the ANSI/ASNT CP-105. The course consists of thirteen chapters that delve deeper into radiographic testing techniques, including reviews of Level I concepts, detailed studies of radiation types, radiographic quality assessment, and advanced digital radiography. It covers practical applications like film processing, radiographic techniques, and discontinuity classifications, culminating in exams that upon successful completion, grant a certificate validating the fulfillment of the training hours required for Level II certification in radiographic testing.

Time of Flight Diffraction Level II

Contact Hours: **40** | Recertification Point Eligible: **Yes**

This comprehensive ultrasound testing course is structured into four sections, covering the basic principles of ultrasound, advanced time of flight diffraction (TOFD) techniques, detailed data analysis, and a final review. Starting with fundamental concepts like wave properties and instrument components, the course progresses through complex topics such as beam behavior, scan optimization, and interpretation of B-scan images. Interactive exercises throughout the course enhance practical understanding and application of the principles discussed. This curriculum is designed to equip learners with the skills necessary to perform sophisticated ultrasound diagnostic and evaluative tasks in various industrial settings.

Ultrasonic Testing Level I

Contact Hours: **7.5** | Recertification Point Eligible: **No**

This ultrasonic testing (UT) course dives deep into the propagation, reflection, and attenuation of sound, highlighting responses from various discontinuities and exploring different wave modes such as compressional, shear, surface, and thin sheet. It includes practical demonstrations on the use of UT equipment and transducers, focusing on instrument calibration, interpreting displays, and accurately locating reflectors and discontinuities in test specimens. The course also covers thickness measurement procedures and discusses the necessary data for precise reporting, aligning with the training recommendations of SNT-TC-1A.

ASNT Education eLearning List

Ultrasonic Testing Level II

Contact Hours: **15** | Recertification Point Eligible: **Yes**

This advanced Level II Ultrasonic Testing (UT) course builds on basic Level I topics, introducing complex variables such as beam profile, zones of propagation, acoustic impedance, absorption, and scattering. It thoroughly covers angle beam inspection of welds, including mode conversion, refraction, and attenuation, alongside demonstrations on UT instrument calibration and the examination of test specimens. Techniques such as immersion and through transmission are discussed, with a strong emphasis on the accurate evaluation, interpretation of test results, and the importance of detailed test reporting. This self-paced course, which aligns with SNT-TC-1A training recommendations, is comprehensive in its scope, covering principles, theories, equipment, techniques, and requirements essential for proficient UT examinations.

Ultrasonic Thickness Testing

Contact Hours: **10** | Recertification Point Eligible: **Yes**

This Ultrasonic Thickness Testing course is designed to comply with NAS-410, SNT-TC-1A, NavSea Technical Publication, and ANSI/ASNT CP-105 standards, providing a thorough education in ultrasonic testing principles necessary for certification. The curriculum is structured into ten chapters, covering topics from the basics of ultrasonic sound, particle behavior, and wave properties, to more advanced subjects like piezoelectric crystals, transducer technologies, and scan presentations. It also includes practical aspects such as calibration, signal interpretation, and testing variables, culminating in a comprehensive review aligned with SNT-TC-1A requirements.

UT of Concrete Infrastructure

Contact Hours: **1.5** | Recertification Point Eligible: **Yes**

This course is designed for UT technicians, NDT Level IIIs, and NDT managers, and introduces advanced ultrasonic techniques for generating true 3D tomographic images of concrete structures using dry point contact transducers and the total focusing method (TFM). *Note: this module does not fulfill ANSI/ASNT CP-105 requirements toward SNT-TC-1A or CP-189 certification and features educational video excerpts from a 2019 ASNT Annual Conference seminar by Andrey Bulavinov of Acoustic Control Systems, with OEM equipment references provided for instructional purposes only.*

Visual Testing Level I/II

Contact Hours: **9** | Recertification Point Eligible: **No**

This visual testing (VT) course is designed to meet the requirements of NAS-410, SNT-TC-1A, and NavSea Technical Publication T9074-AS-GIB-010/271, ensuring compliance with the ANSI/ASNT CP-105 standards for nondestructive testing personnel. The course is structured into 15 comprehensive chapters, covering a wide range of topics from the fundamentals of visual testing, including the electromagnetic spectrum and eyesight requirements, to the more technical aspects such as lighting, tool usage, and advanced inspection techniques for various materials and components. It also delves into weld inspections, bolting discontinuities, pump and valve examinations, and even touches on machine vision and material failure processes.

