

# NONDESTRUCTIVE TESTING (NDTE)

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## **NDTE 1301 Radiographic Film Interpretation of Weldments 3 Credits (2 Lec, 2 Lab)**

This course is a study of radiographic film, including exploration of radiographic basics, image interpretation, and causes and effects of discontinuities, taught to American Society for Nondestructive Testing (ASNT) Level I & II for Radiographic Film Interpretation, and American Welding Society (AWS) standards. Course is 64 Contact Hrs.

Course Type: Technical

## **NDTE 1405 Introduction to Ultrasonics: Level 1 & 2 4 Credits (3 Lec, 3 Lab)**

This course covers the basic theory and applications of the ultrasonic techniques of materials testing covering the theoretical material for certification to American Society for Nondestructive Testing (ASNT) Level I & II standards. Course is 96 Contact Hrs.

Course Type: Technical

## **NDTE 1410 Liquid Penetrant, Magnetic Particle and Visual Testing: Level 1 & 2 4 Credits (3 Lec, 3 Lab)**

This course is a theoretical study and practical application of the Nondestructive Testing techniques of Visual, Liquid Penetrant and Magnetic Particle Testing, required by quality assurance and test personnel, to American Society for Nondestructive Testing (ASNT) Level I & II standards. Course is 96 Contact Hrs.

Course Type: Technical

## **NDTE 1440 Eddy Current Testing 4 Credits (3 Lec, 3 Lab)**

This course covers the general principles of Eddy Current Testing including theory, knowledge, and skills for basic examination; effects of material properties, probe types, calibration standards, and equipment selection, to American Society for Nondestructive Testing (ASNT) Level I & II standards. Course is 96 Contact Hrs.

Course Type: Technical

## **NDTE 1454 Intermediate Ultrasonics: Flaw Detection and Sizing 4 Credits (3 Lec, 3 Lab)**

This course covers applications of the ultrasonic techniques of materials testing for flaw sizing and characterization. Course is 96 Contact Hrs.

Prerequisite(s): NDTE 1405

Course Type: Technical

## **NDTE 2401 Advanced Ultrasonics: Phased Array and A.U.T. 4 Credits (3 Lec, 3 Lab)**

This course emphasizes examination of components and, characterization of flaws using advanced Ultrasonic inspection techniques such as phased array 'PAUT'. Course is 96 Contact Hrs.

Prerequisite(s): NDTE 1405, and NDTE 1454

Course Type: Technical

## **NDTE 2411 Welding Inspection 4 Credits (3 Lec, 3 Lab)**

This course covers welding fundamentals, welding inspection and code interpretation in preparation for the AWS 'Certified Welding Inspector' exam, or the knowledge base to gain field experience, in accordance with American Welding Society (AWS) standards. Course is 96 Contact Hrs.

Course Type: Technical

## **NDTE 2439 Pressure Piping and Valve Inspection 4 Credits (3 Lec, 3 Lab)**

This course covers the general principles of Pressure Piping Inspection utilizing the American Petroleum Institute (API) Body of Knowledge, and American Society of Mechanical Engineers (ASME) documents that pertain to Pressure Piping Inspection to prepare for the API 570 certification examination, or to gain the knowledge base to gain field experience, plus the addition of the inspection of valves as related to API. Course is 96 Contact Hrs.

Course Type: Technical

## **NDTE 2440 Pressure Vessel Inspection 4 Credits (3 Lec, 3 Lab)**

This course covers the general principles of Pressure Vessel Inspection utilizing the American Petroleum Institute (API) Body of Knowledge, and American Society of Mechanical Engineers (ASME) documents that pertain to Pressure Vessel Inspection to prepare for the API 570 certification examination, or to gain the knowledge base to gain field experience. Course is 96 Contact Hrs.

Course Type: Technical