Non-Destructive Testing Technology
(3WLD-NDT, 6WLD-QAT, 4WLD-NDT, EWLD-NDT, 5WLD-NDT, and MWLD-NDT)

Program Information
If you have a technical mind, you are in luck! Houston is home to the largest petrochemical and refining complex in the nation, and is the center for oil and gas equipment, so the demand for skilled inspection and quality technicians continues to grow!

Graduates of the San Jacinto College non-destructive testing program enter the workforce with training skills that exceed certification requirements, an accomplishment highly prized by the companies that continually hire students straight out of the program.

If you have an eye for detail, a passion for quality and a commitment to integrity, a degree or certificate in non-destructive testing or quality assurance may be the right path for you!

Non-destructive testing (NDT) is the branch of material sciences where technicians may conduct a variety of examinations or tests utilizing a variety of methods ranging from: Visual (VT), Liquid Penetrant (PT), Magnetic Particle (MT), Ultrasonic (UT), Eddy Current (ET), and Radiographic (RT) Testing.

Our courses are taught exceeding ASNT SNT-TC-1A requirements. In addition to the NDT methods, our program also includes courses for: AWS Certified Welding Inspector (CWI), API Inspector, NACE Corrosion Inspector, and Quality Assurance (QA).

Through these courses students will learn to use tools and equipment associated with these inspection methods. The program covers more than NDT courses, including essential foundations in metallurgy, corrosion, metrology and blueprints, standards and codes, quality assurance and statistical process control.

The examination of aircraft, trains, oil and gas drilling tools, pipelines, refineries, power plants, nuclear reactors, bridges, dams, and building structures, all use non-destructive testing (NDT) techniques. Virtually everything that is manufactured uses NDT and quality.

The San Jacinto College NDT technology program:
- Prepares students to work and become certified in NDT, metallurgical or quality positions.
- Assists students in attaining technician jobs in the petrochemical industry, turbine and power generation, manufacturing, structural, aerospace, transportation and many more.

Career Opportunities
Graduates of San Jacinto College’s NDT technology program may find employment as:
- NDT Technician in: VT, PT, MT, UT, ET, RFI.
- AWS - Certified Welding Inspector (CWI).
- API Inspector.
- Quality Technician, Inspector or Manager.
- Metallurgical, Corrosion or Coating Technician.

For More Information
Call Center: 281-998-6150
General Email: information@sjcd.edu
San Jacinto College Central
8060 Spencer Hwy.
Pasadena, Texas 77505
281-998-6150, ext. 1814

An equal opportunity institution
Non-Destructive Testing Technology (MWLD-NDT)

Marketable Skills Achievement Award

**First Term**  
NDTE 1405 Introduction to Ultrasonics ............................................ 4  
METL 1305 Welding Metallurgy I ........................................................ 3  
NDTE 1410 Liquid Penetrant/Magnetic Particle Testing .................... 4  
**Marketable Skills Achievement Award Total**  11

Non-Destructive Testing Technology (EWLD-NDT)

Enhanced Skills Certificate

**First Term**  
ENGL 2311 Technical and Business Writing or  
  ENGL 1302 Composition II ............................................................ 3  
QCTC 1341 Statistical Process Control ............................................. 3  
QCTC 1343 Quality Assurance ......................................................... 3  
**Enhanced Skills Certificate Total**  9

Quality Assurance Technology (6WLD-QAT)

Occupational Certificate

**First Term**  
QCTC 1343 Quality Assurance .......................................................... 3  
QCTC 1378 Metrology ................................................................. 3  
QCTC 1376 Testing and Inspection Systems .................................... 3  
QCTC 2331 Standards ................................................................. 3  
QCTC 1341 Statistical Process Control or  
  PTAC 2314 Principles of Quality .................................................. 3  
**Occupational Certificate Total**  15

Capstone Experience: QCTC 1341 or PTAC 2314

Non-Destructive Testing Technology (4WLD-NDT)

Certificate of Technology

**First Term**  
NDTE 1405 Introduction to Ultrasonics: Level 1 & 2 ....................... 4  
METL 1305 Welding Metallurgy I ...................................................... 3  
NDTE 1410 Liquid Penetrant/Magnetic Particle Testing: Level 1 & 2 ....... 4  
**Subtotal**  11

**Second Term**  
QCTC 2331 Standards ................................................................. 3  
QCTC 1376 Testing and Inspection Systems .................................... 3  
NDTE 1440 Eddy Current Testing .................................................. 4  
NDTE 1354 Intermediate Ultrasonics: Flaw Detection and Sizing ........ 3  
**Subtotal**  13

**Certificate of Technology Total**  24

Capstone Experience: QCTC 2331

Note: For complete program descriptions, please refer to the San Jacinto Community College District Catalog online at www.sanjac.edu/catalog.
Non-Destructive Testing Technology
(5WLD-NDT)

Level 2 Certificate

First Term  Credit
NDTE 1405 Introduction to Ultrasonics: Level 1 & 2 .......................... 4
METL 1305 Welding Metallurgy I ..................................................... 3
NDTE 1410 Liquid Penetrant/Magnetic Particle Testing: Level 1 & 2 .................................................. 4
QCTC 2331 Standards .................................................................. 3
Subtotal 14

Second Term  Credit
QCTC 1376 Testing and Inspection Systems .................................. 3
NDTE 1440 Eddy Current Testing .................................................. 4
NDTE 1301 Film Interpretation of Weldments ............................... 3
NDTE 1354 Intermediate Ultrasonics: Flaw Detection and Sizing .................................................................. 3
Subtotal 13

PostY1Summer  Credit
METL 1313 Introduction to Corrosion .......................................... 3
QCTC 1378 Metrology .................................................................. 3
Subtotal 6

Third Term  Credit
METL 2335 Welding Metallurgy II ................................................. 3
NDTE 2301 Advanced Ultrasonics ................................................. 3
NDTE 2311 Preparation for Certified Welding Inspector Exam .................................................................. 3
NDTE 2339 Pressure Piping Inspection or WLDG 2380 Cooperative Education - Welding Technology/Welder .................................................................. 3
Subtotal 12

Level 2 Certificate Total 45

Capstone Experience: METL 2335

Non-Destructive Testing Technology
(3WLD-NDT)

Associate of Applied Science Degree

First Term  Credit
NDTE 1405 Introduction to Ultrasonics: Level 1 & 2 .................... 4
METL 1305 Welding Metallurgy I ..................................................... 3
NDTE 1410 Liquid Penetrant/Magnetic Particle Testing: Level 1 & 2 .................................................. 4
Speech .................................................................................. 3
Subtotal 14

Second Term  Credit
QCTC 2331 Standards .................................................................. 3
QCTC 1376 Testing and Inspection Systems .................................. 3
NDTE 1440 Eddy Current Testing .................................................. 4
*Social and Behavioral Sciences ................................................. 3
Subtotal 13

PostY1Summer  Credit
NDTE 1301 Film Interpretation of Weldments ............................... 3
ENGL 1301 Composition I ......................................................... 3
Subtotal 6

Third Term  Credit
NDTE 1354 Intermediate Ultrasonics: Flaw Detection and Sizing .................................................................. 3
METL 1313 Introduction to Corrosion .......................................... 3
QCTC 1378 Metrology .................................................................. 3
Math 1333 Contemporary Mathematics for Technical Programs or MATH 1314 College Algebra or higher ................................. 3
Subtotal 12

Fourth Term  Credit
METL 2335 Welding Metallurgy II ................................................. 3
NDTE 2301 Advanced Ultrasonics ................................................. 3
NDTE 2311 Preparation for Certified Welding Inspector Exam .................................................................. 3
NDTE 2339 Pressure Piping Inspection or WLDG 2380 Cooperative Education - Welding Technology/Welder .................................................................. 3
*Humanities or Fine Arts ......................................................... 3
Subtotal 15

Associate of Applied Science Degree Total 60

Capstone Experience: METL 2335

* Courses which satisfy this requirement are listed in the Humanities and Fine Arts, and Social and Behavioral Sciences sections of the Transfer Core Curriculum.