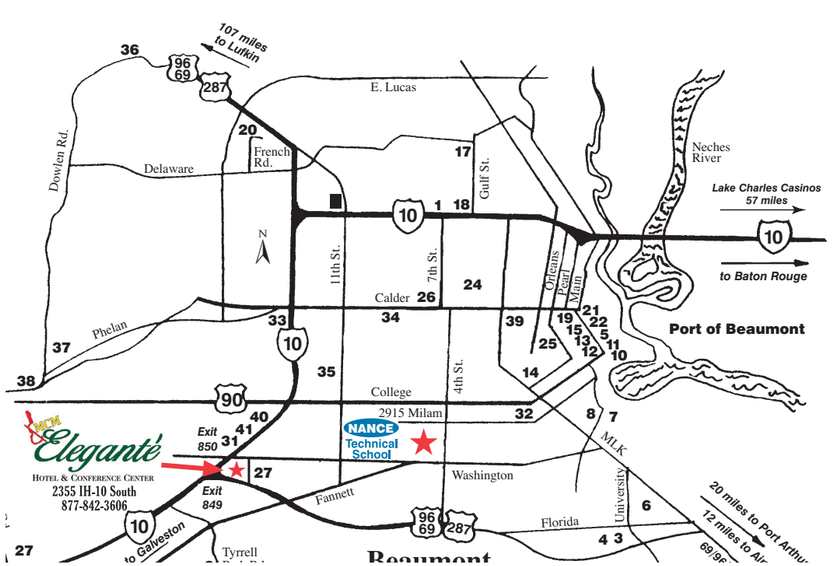
A HISTORY

In 1976, recognizing the increasing complexity of HVACR equipment and the cost and time involved in obtaining on-shore contractor service personnel, Nance created the Nance Universal HVACR Technical School. From the beginning, its charter has been to provide operations personnel within the offshore industry with the tools and training necessary to increase the quality of maintenance, make minor repairs and perform basic diagnostic tests on the equipment for which they are responsible. The school teaches the basic theories of the refrigeration cycle, provides an understanding of the functions of system components and addresses the EPA requirements involved in operating and servicing HVACR equipment.

The school has been a resounding success, with more than 300 students per year having attended the various courses offered. Each of these technicians returned to their jobs better equipped to maximize equipment performance, extend equipment life and reduce operating costs through better maintenance and on-site minor repairs.

The school's training provides an immediate return on investment, and Nance is proud of its role in helping make the offshore industry more profitable and more efficient.



BEAUMONT POINTS OF INTEREST

1. Visitor Information Center
2. Tyrrell Park
3. Gladys City Spindletop Boomtown
4. Lucas Gusher Monument
5. Riverfront Park
6. Lamar University
7. Clifton Walking Beam
8. Temple To The Brave
9. Post Office
10. Port Of Beaumont
11. Police - Municipal Court Bldg.
12. Beaumont Public Library
13. Tyrrell Historical Library
14. St. Anthony's Cathedral
15. Energy Museum
16. Fair Park
17. Cattail Marsh
18. Babe Didrikson Zaharias Memorial Museum
19. Beaumont Art Museum
20. Beaumont Heritage Society
21. Art Museum of Southeast Texas
22. Fire Museum
23. Clifton Steamboat Museum
24. McFaddin-Ward House
25. Cinemark Theater Beaumont
26. Old Town Restaurants & Shops
27. MCM Eleganté Hotel
28. Pappadeaux Seafood Kitchen
29. Tinseltown Theater
30. Cheddars Restaurant (American)
31. Carrabba's (Italian)
32. Elena's (Mexican)
33. Saltgrass Steakhouse
34. Luke's Icehouse

SHOPPING CENTERS

35. Parkdale Mall (200 stores)
36. The Mildred Bldg. (antiques)
37. Harley Davidson
38. Honda

AIR CONDITIONING • REFRIGERATION
NANCE
HVACR TECHNICAL SCHOOL

UNIVERSAL HVACR TECHNICAL SCHOOL

2024 SCHEDULE

www.nanceschool.com
PHONE 1-877-626-2322
FAX (409) 838-6219

- BASIC — EPA CERTIFICATION & REFRIGERANT RECOVERY
- ADVANCED — TROUBLESHOOTING HVAPC & UNDERSTANDING CHILLED WATER SYSTEMS
- BRAZING AND BONDING LAB
- ELECTRICAL
- REFRESHER
- OVERSEAS SESSIONS

2024 SEMINAR SCHEDULE

	S	M	T	W	T	F	S
JANUARY		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31			
FEBRUARY					1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29		
MARCH						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						
APRIL		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30				
MAY				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
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JUNE							1
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	9	10	11	12	13	14	15
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	23	24	25	26	27	28	29
	30						
JULY		1	2	3	4	5	6
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	14	15	16	17	18	19	20
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	28	29	30	31			
AUGUST					1	2	3
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	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
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SEPTEMBER	1	2	3	4	5	6	7
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	22	23	24	25	26	27	28
	29	30					
OCTOBER			1	2	3	4	5
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	20	21	22	23	24	25	26
	27	28	29	30	31		
NOVEMBER						1	2
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	24	25	26	27	28	29	30
DECEMBER	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

OVERSEAS SESSIONS

- DUBAI* Jun 23 - 27 BAS. Nov 3 - 7 BAS.
- BRAZIL (MACAÉ) Sep 16 - 20 BAS.
- MEXICO (Veracruz) Mar 18 - 22 BAS.
- ENGLAND Apr 22 - 26 BAS.
- SINGAPORE* Feb 18 - 22 BAS.

* Classes in Singapore and Dubai are now held Sunday - Thursday - All other classes are held Monday - Friday

HVACR WORLD-WIDE TRAINING SCHEDULE

2024

AIR CONDITIONING • REFRIGERATION
NANCE
HVACR TECHNICAL SCHOOL

RELIABLY TRAINING PEOPLE
ACROSS THE GLOBE SINCE 1976

SEMINAR SCHEDULE JANUARY - DECEMBER 2024

The following seminars are held at our facility in Beaumont, Texas – "Home of the Spindletop Gusher." Thousands of students have successfully completed training at our facility and overseas. We can bring the training to you at YOUR LOCATION, or you can send your people to us for extensive classroom and laboratory training.

- **Basic Air Conditioning and Refrigeration**
- **EPA Certification & Refrigerant Recovery**
- **Advanced Air Conditioning and Refrigeration**
- **On-site HVACR Training**
- **Troubleshooting Air Conditioning & Refrigeration and the Basics of Chilled Water Systems**
- **Electrical for Air Conditioning and Refrigeration**
- **Brazing & Bonding Lab**

FACILITIES: 25x30 classrooms with the latest in audio and visual aids, together with a 1000 sq. ft. laboratory containing working systems to train students in all types of applications from hermetic type compressors to heavy industrial open types. Working systems, both air and water cooled, are used to provide "hands-on" learning. Air distribution techniques can be fully demonstrated as well.

DRESS: Long pants and closed-toe shoes for both classroom and lab work.

SAFETY: No weapons on our premises.

CLASS HOURS: From 7:30 a.m. - 5:00 p.m. (40 hours)

LOCATION: 2915 Milam, Beaumont, Texas 77701

TUITION: Is due on or before the first day of class.
Tuition does not include meals, lodging, or transportation.

LODGING: We recommend:

MCM Elegante Hotel & Conference Center

2355 IH-10 South • Beaumont, TX 77705
409-842-3600 • Fax: 409-842-0023
877-842-3606 • www.mcmelegante.com
GPS address 3105 Executive Blvd.

NOTE: *If the student does not show up to class, the company will still be billed for that class. This charge will be good for a one-time credit to be used within 90 days. Once the 90 day period is up, the credit is no longer valid. All cancellations should be made 7 days prior to the first day of class. Anytime after this, you will be billed for the class. Overseas cancellations must be made 21 days prior to the first day of class. Anytime after this, you will be billed for the class.*

- **Minimize Repair Cost and Reduce "Downtime"**
- **Maximize Equipment Efficiency • Meet EPA Requirements**

NANCE Air Conditioning • Refrigeration HVACR Technical School

UNIVERSAL HVACR TECHNICAL SCHOOL
Registration: jacquetta@nanceschool.com
www.nanceschool.com • 1-877-626-2322

BASIC AIR CONDITIONING AND REFRIGERATION

RECOMMENDATION: Class is appropriate for electricians or mechanics who are going to maintain air conditioning and refrigeration systems, but who have only limited experience or training in HVACR. Twenty-five (25%) percent of this seminar is "hands on" experience in the laboratory.

SESSIONS: (See schedule) **COST:** $2070.00 – Four Day Seminar (lab and study materials included)

JOB SKILLS TOPICS:

- Definitions
- Refrigerant pressure - temperature chart analysis
- Basic refrigeration cycle
- Compressors - in mechanical refrigeration systems
- Condensers - construction, characteristics and types
- Evaporators - construction
- Refrigerant flow controls - types, functions and adjustments
- Refrigerants
- Basic electricity for refrigeration
- Brazing - system assembly, procedure and repair
- Leak detection
- Recovery and charging of systems and other service techniques
- Scheduled maintenance

EPA CERTIFICATION AND REFRIGERANT RECOVERY

RECOMMENDATION: This seminar in Refrigerant Recovery and Recycling is designed for people who repair, maintain or install equipment that contains or will contain when charged, regulated refrigerants. The proper method of recovery and recycling of these refrigerants is covered using state-of-the-art equipment. Bringing a laptop, tablet, iPad or internet capable device (other than a phone) will allow you to take the exam online. Online allows for immediate results. If only 2 sections are passed, you will have the opportunity to re-test before leaving our facilities. **Bring smart device for test.** We can accommodate the few that do not have access to a device.

SESSIONS: (See schedule) **COST:** $405.00 - One Day Seminar (lunch, study guide, EPA exam included)

JOB SKILLS TOPICS:

- General Information
- Safety precautions
- Definitions
- Laws and directives
- Refrigerant pumpdown
- Recovery and recycle, reclaiming
- Review of available equipment
- Practice test
- Examination for certification
- EPA approved wallet cards and certificate for successful participants

ADVANCED AIR CONDITIONING AND REFRIGERATION

RECOMMENDATION: Class is appropriate for those already involved in repair and maintenance of air conditioning and refrigeration equipment. Fifty (50%) percent of this seminar is "hands on" experience in the laboratory.

PREREQUISITE: Basic A/C. **SESSIONS:** (See schedule)

COST: $2175.00 - Five Day Seminar (lab and study materials included)

JOB SKILLS TOPICS:

- Review of refrigeration systems
- Superheat and subcooling calculation
- Refrigerant oils
- Accessories - where they are used and how they work
- Cycle controls - mechanical, electrical and electronic
- Refrigerant system cycle controls - compressor system loading and unloading adjustments
- Pump-down and repair of system components on low pressure side including refrigerant flow controls
- Dehydration and evacuation procedures
- Water-cooled condensers and cooling towers
- Advanced electrical schematic reading
- Airside problems, psychometrics, capacity calculation
- Troubleshooting the system
- Scheduled maintenance

ON-SITE HVACR TRAINING

RECOMMENDATION: This class is designed around your crews needs and your site-specific equipment. The class is built around your schedule, your equipment and at the location of your choice. We will have the curriculum written to reflect your equipment which in turn will enhance the learning process and empower your crew.

SESSIONS: Determined by company **COST:** Determined Individually

JOB SKILLS TOPICS: Determined by specific needs

TROUBLESHOOTING AIR CONDITIONING & REFRIGERATION SYSTEMS AND THE BASICS OF CHILLED WATER SYSTEMS

RECOMMENDATION: Those attending this seminar should have prior on-the-job experience, as well as some technical training in HVACR. Seventy (70%) percent of this seminar is "hands on" experience in the laboratory. This class will also include the basic knowledge of chilled water systems.

PREREQUISITE: Basic and Advanced courses. **SESSIONS:** (See schedule)

COST: $2445.00 - Five Day Seminar (lab and training materials included)

JOB SKILLS TOPICS:

- Review of refrigeration systems, including the refrigeration cycle, accessories, water and air-cooled systems and electrical control
- Piping layout and oil problems
- Collecting and analyzing data
- Troubleshooting the entire system - electrical and refrigeration
- Cleaning up after a compressor burnout
- Preventing future compressor failures
- Systematic ways of eliminating refrigerant and electrical problems
- Air analysis, problems and measurements
- Capacity calculation
- Detecting and eliminating floodback and slugging problems
- Tuning up your system for maximum efficiency
- Chilled water refrigeration cycle
- Chilled water fluid cycle
- Operation of common refrigeration, fluid and electrical components
- Measuring system cooling capacity
- Measuring system fluid capacity
- Measuring fluid flow
- Electrical sequence of operation
- Refrigerant and oil charging
- Electrical troubleshooting
- Refrigerant troubleshooting
- Fluid-side troubleshooting
- Scheduled maintenance

ELECTRICAL TROUBLESHOOTING FOR AIR CONDITIONING AND REFRIGERATION

RECOMMENDATION: Most problems in HVACR systems are electrical. This is a class for those that do **not** have electrical experience. The three-day class begins with electrical fundamentals and advances to basic electrical troubleshooting techniques. The course will discuss how to diagnose, troubleshoot and repair common components found in HVACR systems. The lab portion of the course includes wiring basic circuits; troubleshooting components and troubleshooting operating systems. The course will show the learner how to use troubleshooting tools such as the voltmeter, ohmmeter and ammeter. This is a vital class to learn the basics of electricity and troubleshooting.

SESSIONS: (See schedule) **COST:** $1720.00 - Three Day Seminar (lab and training materials included)

JOB SKILLS TOPICS:

- Electrical safety
- Electrical fundamentals
- Use of electrical instruments
- Understanding electrical symbols
- Reading electrical diagrams
- Basic diagnostic, troubleshooting and repair skills
- Troubleshooting HVACR components such as fuses, transformers, contactors, relays, capacitors, and thermostats
- Troubleshooting fan and pump motors
- Troubleshooting compressor motors
- Troubleshooting HVACR systems
- Learning to apply Ohm's Law
- Wiring basic air conditioning circuits
- Using electrical diagrams to troubleshoot
- Planning the troubleshooting process

HVACR REFRESHER COURSE

RECOMMENDATION: This seminar is appropriate for all of those who have previously attended our Basic, Advanced and Troubleshooting HVACR seminars. It is designed to be taken every 3 years to keep students abreast of any changes, updates or new laws within the HVACR industry and refresh skills learned in prior years.

PREREQUISITE: Basic and Advanced **SESSIONS:** (See schedule)

COST: $2445 - Five Day Seminar (lab and training materials included)

JOB SKILLS REVIEWS:

- EPA updates
- Refrigerant updates
- Safety precautions
- Accessories- where they are used and how they work
- Cycle controls
- Refrigerant system cycle controls
- Electrical schematic reading
- Water-cooled condensers and cooling towers
- Split systems
- Troubleshooting the entire system
- Cleaning up after a compressor burnout
- Preventative and scheduled maintenance
- Capacity calculation
- Tuning up systems for maximum efficiency
- Collecting and analyzing data
- Recovery and charging of systems
- Leak detection
- Intro to chilled water systems

OVERSEAS SESSIONS

RECOMMENDATION: Class is appropriate for anyone involved in the maintenance, troubleshooting and/or repair of air conditioning and refrigeration equipment. This seminar is especially recommended for anyone in the offshore drilling, oil production, marine maintenance, petrochemical, refinery, manufacturing, transportation and institutional industries. Includes technician training for EPA certification. Please bring a laptop, tablet, iPad or (internet capable device other than a phone) to class to take the exam online. This will allow for immediate results and if needed, you will be able to retake any sections missed before leaving the seminar.

COST: $3200.00 - Five-Day Seminar (lunch, study guide, textbook, EPA exam included)

JOB SKILLS TOPICS:

- Safety, people, equipment and products
- How the refrigeration system works
- Component function and purpose
- Processing a system prior to charging
- Demonstrations of refrigerant recovery, dehydration and charging
- Refrigerants
- Elements of a properly working system
- Effective ways of leak detection
- How to troubleshoot compressors
- Accessories and how they work
- Pumpdown, repair and replacement of compressors
- Air and/or water flow requirements
- Tools and instruments required
- Scheduled maintenance
- Practical troubleshooting
- Collecting and analyzing data
- Systematically isolating refrigeration problems
- Eliminating original cause of component failure
- Clean-up procedures after a compressor burnout
- Eliminating floodback and slugging problems

"NEW" BRAZING & BONDING LAB

This class covers all major types of soldering techniques used commonly in the HVAC industry. Information includes a breakdown of brazing material types and usage, and practical applications. This class is comprised of 75% lab and 25% classroom instruction. Flared fitting preparation and installation is covered as well as push and press lock fittings. Brazing and soldering various metals. We will work with brass, steel, and aluminum. At the conclusion of instruction, students should have a basic knowledge to perform field repairs on all of the currently available materials used on HVAC systems.

SESSIONS: (See schedule)

COST: $1200.00 - Two Day Seminar (lab and training materials included)

JOB SKILLS TOPICS:

- General facts and safety information
- Brazing copper joints and fittings
- The swedging of copper piping
- Usage of torches, reamers, and cutters
- Usage of flaring tools
- Installing flare fittings on copper piping
- Push lock and press lock fittings
- Usage of nitrogen while brazing
- Lab projects consisting of the methods listed above are pressure tested to 200 psi
- Various metals lab
- Copper to copper brazing
- Copper to brass project using fluxed rods
- Copper to steel project using fluxed rods
- Copper to aluminum using solder and flux
- Pressure test project up to 200 psi
- Repairing copper tubing using brazing rods
- Repairing aluminum tubing using aluminum fluxed rod (time permitting)