

PORT HOUSTON

MARITIME EDUCATION GUIDE

The future looks bright!





## **ABOUT PORT HOUSTON**

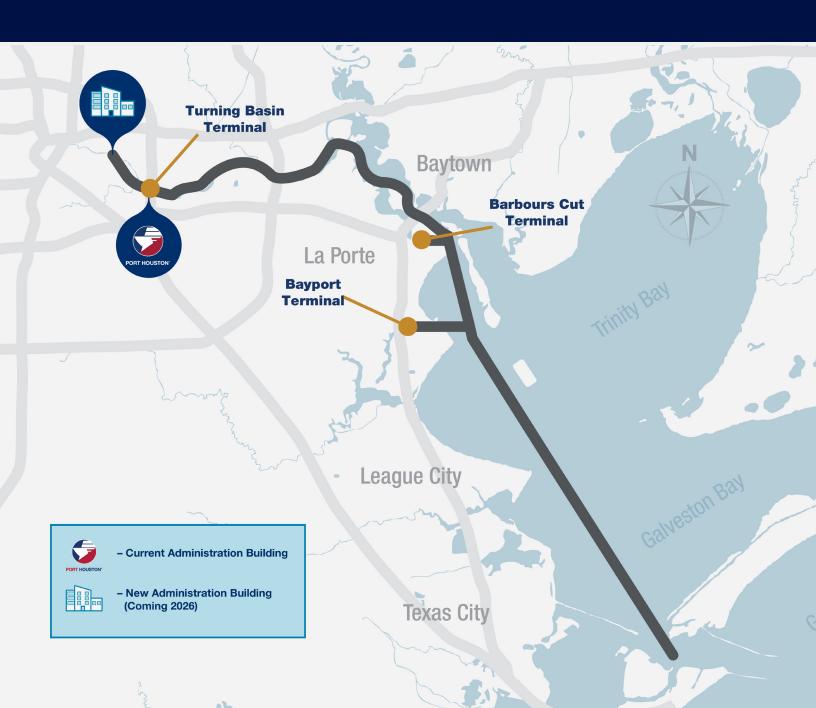
For more than 100 years, Port Houston has owned, managed and operated the public wharves and terminals along the Houston Ship Channel, including the area's largest breakbulk facility and two of the most efficient container terminals in the country. Port Houston is the advocate and a strategic leader for the Channel. The Houston Ship Channel complex and its more than 200 public and private terminals, and is the nation's largest port for waterborne tonnage and an essential economic engine for the Houston region, the state of Texas and the U.S.

# **Port Houston Facts:**

- Opened in 1914
- Handles more than 73% of the US Gulf container traffic
- Creates jobs and facilitates economic development

# **Houston Ship Channel Facts:**

- A 52-mile-long channel, with more than 200 public and private facilities alongside it
- Busiest waterway in the nation
- Supports nearly 3.37M jobs nationwide



# What is Maritime?

Maritime is something connected to the sea or waterways throughout the world, especially in relation to navigation, shipping, and marine engineering. Any land adjacent to the sea can also be considered maritime. Our everyday lives are affected by maritime and the industries that support the movement of cargo and waterborne commerce.

## FOUR SECTORS OF THE MARITIME INDUSTRY



## **PORTS & LOGISTICS**

Ports and maritime-related transportation logistics move everything we use as a society from the location of raw materials, to areas of production and finally to market where the goods are sold. Our ports and transportation systems are intermodal—moving from ship to train to the roads on semi-trailers and back again. We move raw materials and finished goods to be sold to all corners of the globe. The transportation and logistics industry are dynamic places to work where change is the constant.



## **MARINER & SEA-GOING**

There are many careers that will allow you to have an interesting and dynamic career—while traveling the world on the high seas. Everything from maintaining massive engines that power large ships, to piloting vessels or cooking meals for those on board. Some jobs require specific Coast Guard certifications and study through our nation's maritime institutions while others require a passport, security clearance and a willingness to work.



# CRUISE SHIPS & RECREATIONAL BOATING

The cruise industry is a highly profitable international activity, and the fastest growing sector of the travel, tourism and leisure industry. The area of recreational boating is no different. There is a large industry in the United States that designs, produces, repairs and maintains cruise ships and yachts. Mechanics, designers, engineers, service technicians and marina personnel all work to keep the cruise and recreational boating industry moving to destinations all over the world.



# SHIPBUILDING & SHIP REPAIR

The shipbuilding and ship repair industries are some of our nation's largest and most dynamic employers. These industries build and repair all types of sea-going vessels from aircraft carriers to submarines, from cargo ships to tugs and barges. This industry takes on large-scale projects that need a workforce that is flexible, dynamic and motivated. Careers in shipbuilding and ship repair provide skilled workers with an excellent wage and career opportunities.

## **Business & Commercial**

- Business Equity Manager
- Business Process Manager
- Certification Specialist
- Economic Development Manager
- Grants Program Manager
- Project Controls Analyst
- Real Estate Manager
- Trade Manager

## **Channel Infrastructure**

- Asset Management Analyst
- Geographic Information Systems Analyst
- Geographic Information Systems Technician
- Real Property Manager

# **Engineering**

- Electrical Engineer
- Field Engineer
- Production Engineer

# **Environmental Affairs**

- Environmental Compliance
- Environmental Planning Analyst
- Sustainability Manager

#### **Finance**

- Accountant
- Auditor
- Contract Administrator
- Contract Manager
- Controller
- Customer Billing Services
- Financial Analyst
- Procurement Analyst
- Treasury Manager

#### **Government & Public Relations**

- Community Relations
- Government Relations
- Media & Public Relations

#### **Human Resources**

- Benefits Administrator
- Compensation Manager
- Corporate Strategy
- Employee Development & Engagement
- Talent Manager

# **Information Technology**

- Applications Analyst
- IT Administrator
- Network Engineer
- Security Engineer
- Support Technician
- Systems Developer

# Legal

- Attorney
- Compliance Analyst
- Paralegal
- Records Manager

#### **Maintenance**

- Flectrician
- HVAC Technician
- Inventory Manager
- Mechanic
- Plumber
- Welder

# Marketing

- Communications Specialist
- Digital Marketing
- Graphic Designer

# **Maritime Operations**

- Barge Planner
- Captain
- Deckhand
- Maritime Operations Trainer
- Merchant Mariner
- Vessel Coordinator

#### **Port Infrastructure**

- Facility Planning
- Project Manager

# **Port Operations**

- Container Operation
- Crane Operator
- Crane Technician
- Customer Service Coordinator
- Gate Manager
- Logistics Coordinator
- Operations Superintendent
- Terminal Operations

# Project Management & Construction

- Project Manager
- Construction Manager
- Construction Inspector
- Surveyor

# **Risk**

- Claims Analyst
- Risk Manager
- Terminal Safety Manager

# **Security & Emergency Operations**

- Captain Fireboat
- Customs & Border Protection
   Officer
- Firefighter
- Police officer
- Port Security Officer
- Telecommunications Officer

# **Transportation**

- Dredge Boat Operator
- Freight Mobility
- Transportation Clerk
- Truck Driver & Loader
- Vessel Pilot

As a major source of jobs for the region, Port Houston has a strategic stake in the development of a robust maritime workforce. We commit to this development through several activities including:

# **Maritime Education Program**

In recent years, Port Houston has invested more than \$5 million dollars in the maritime education program through collaboration with local academic partners. Benefits of the program include dual credit courses, industry-specific certifications, field trips, workshops, seminars, internships, and scholarship opportunities.

# **Career Exploration & Workforce Development**

The maritime industry has numerous high-wage, high-demand regional job opportunities. Career exploration allows us an opportunity to assist students in discovering their interests and matching them with opportunities available to them after graduation. In addition, students learn what level of education, work experience, and professionalism they need to succeed in their chosen career.

# **Port of Houston Partners in Maritime Education (PHPME)**

For the past decade, Port Houston has led an alliance of industry, business, community, and academic stakeholders, as well as local state and federal entities, to address the need for a well-trained talent pool of future maritime leaders.

# With these initiatives, our primary goals are:



# **Introduce**

an increasing number of youth and young adults to maritime career opportunities in port-related industries



# **Encourage**

higher education in the Maritime Science, Logistics, Transportation, Distribution, and other related fields of study, such as Security, Environment, and Global Supply Chain



# **Develop**

partnerships between industry and academic institutions to create relevant education programming that is consistent with industry needs

## **Academic partners include:**

- Aldine ISD
- Galena Park ISD
- Goose Creek CISD
- Houston ISD
- La Porte ISD
- Pasadena ISD
- Texas City ISD

- Houston Community College
- Lee College
- Lone Star College
- San Jacinto College
- Texas A&M University Galveston
- Texas Southern University
- University of Houston





# **Your Path to Success**

1

# **OBTAIN**

new skills that will benefit your future.

2

# **TRAIN**

for a career you're passionate about.

3

# CONNECT

with the right people and resources.

Embark on a sea of possibilities...

Your Journey Starts Here!

# **Opportunities Include:**

- Maritime and Logistic Career Exploration
- PTO/Parent Engagement
- Career & Technical Education Recruiting
- Career Fairs
- Middle School Field Day
- Classroom Support
- Industry Collaboration
- Educational Boat Tour
- Professional Development



MIDDLE SCHOOL

Whether you decide to enter the workforce, get an apprenticeship, or attend college or university, there is a pathway for you.



Choose your path



## **MARITIME & LOGISTICS**

Attend one of the regional designated High School Maritime & Logistics programs within Houston, Pasadena, Galena Park, La Porte, Texas City, Goose Creek, and Aldine.

## **Programs Focus On:**

- Marine Science
- Transportation, Distribution, and Logistics
- Shipboard Engineering
- Port Operations

# **Program Benefits:**

- Dual Course Credits
- TWIC Card
- CPR Certification
- Forklift Certification
- Basic Boating Certificate
- OSHA 10 Hour General Safety Certification
- Certified Logistics Associate (CLA) Certification
- Field Experiences
- Paid Internships
- College Scholarships



# **CAREER & TECHNICAL**

Enroll in one of the following Career and Technical Education (CTE) programs within your local school district. Some programs may offer certificates upon completion.

#### **CTE Program Options**

- Transportation, Distribution, and Logistics
- Mechanic / Diesel Technology
- Drafting / Design
- Construction Technology
- Electrical
- Robotics
- Welding
- Culinary
- Information Technology
- Business Management
- Criminal Justice
- Engineering



## **DUAL-CREDIT**

Each school district offers a variety of S.T.E.A.M. dual-credit courses. Make sure that the Dual-Credit courses you are taking are transferable to the college/university of your choice. Talk to your counselor about your Dual-Credit options.

#### **Dual-Credit Courses**

- Algebra I
- Algebra II
- Biology
- English Composition I
- English Composition II
- Chemistry
- Computer Science
- Geometry
- Business Math
- Psychology

# POST-HIGH SCHOOL

**OPPORTUNITIES** 

Your path is yours to choose!



## **ENTRY-LEVEL WORKFORCE**

Enter the workforce in one of the four Maritime Industry Segments:

- Port Operations and Logistics
- Shipbuilding and Ship Repair
- Mariners and Sea-going
- Cruise Ship and Recreational Boating

# Some Entry Level Opportunities Include:

- Deckhand
- Ordinary Seaman
- Utility Worker
- Steward Assistant
- Forklift Operator
- Freight/Material Mover
- Logistics Coordination
- Longshoreman
- General Labor
- Inventory Clerk



# **APPRENTICESHIP**

Registered Apprenticeship Programs

#### **Port Houston**

(On-the-Job Training and Classroom Instruction)

- Electrician
- Mechanic
- Crane Technician

# **Paul Hall Center of Maritime Training & Education**

(One-year Training Program/First Job Guarantee)

- Able Seafarer-Deck
- Engineer
- Steward



#### COLLEGE

Certificate/AAS Degree/AS Degree











# UNIVERSITY

BA/BS/BAS/Master's/PhD









#### MARITIME ACADEMY

The USMMA and six maritime academies meet the need by educating young men and women for service as officers in the United States Merchant Marine, U.S. Armed Forces, and Nation's Intermodal Transportation System:





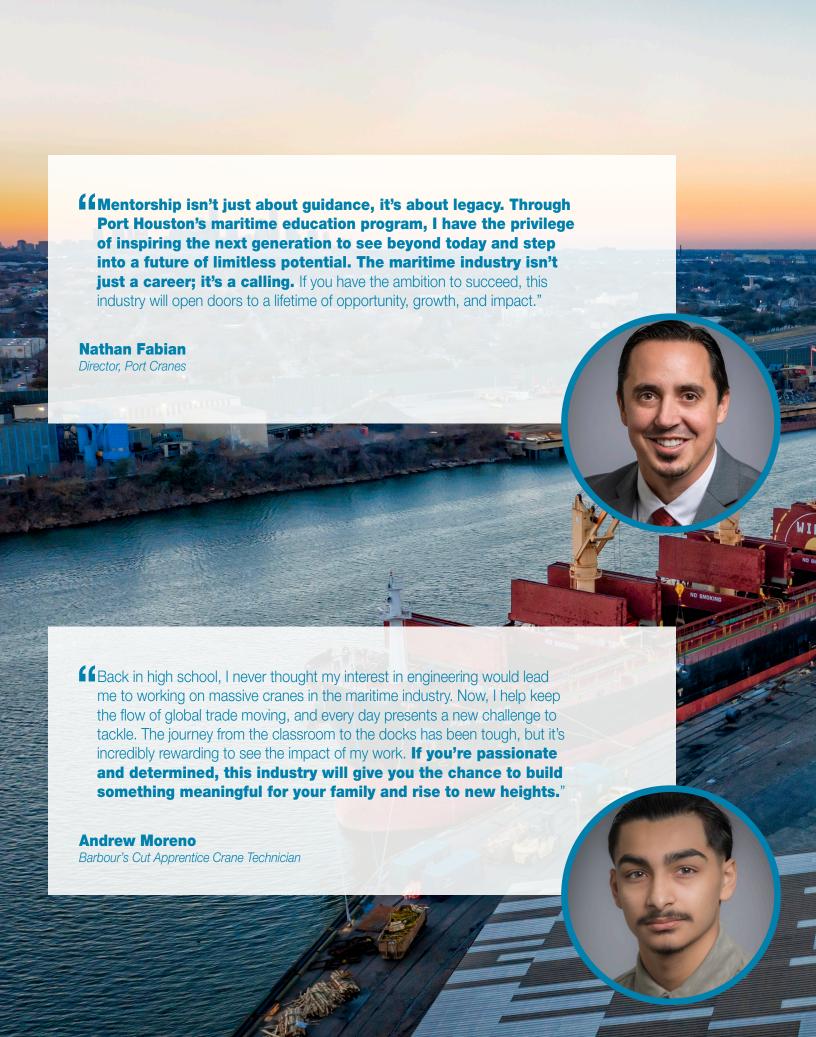


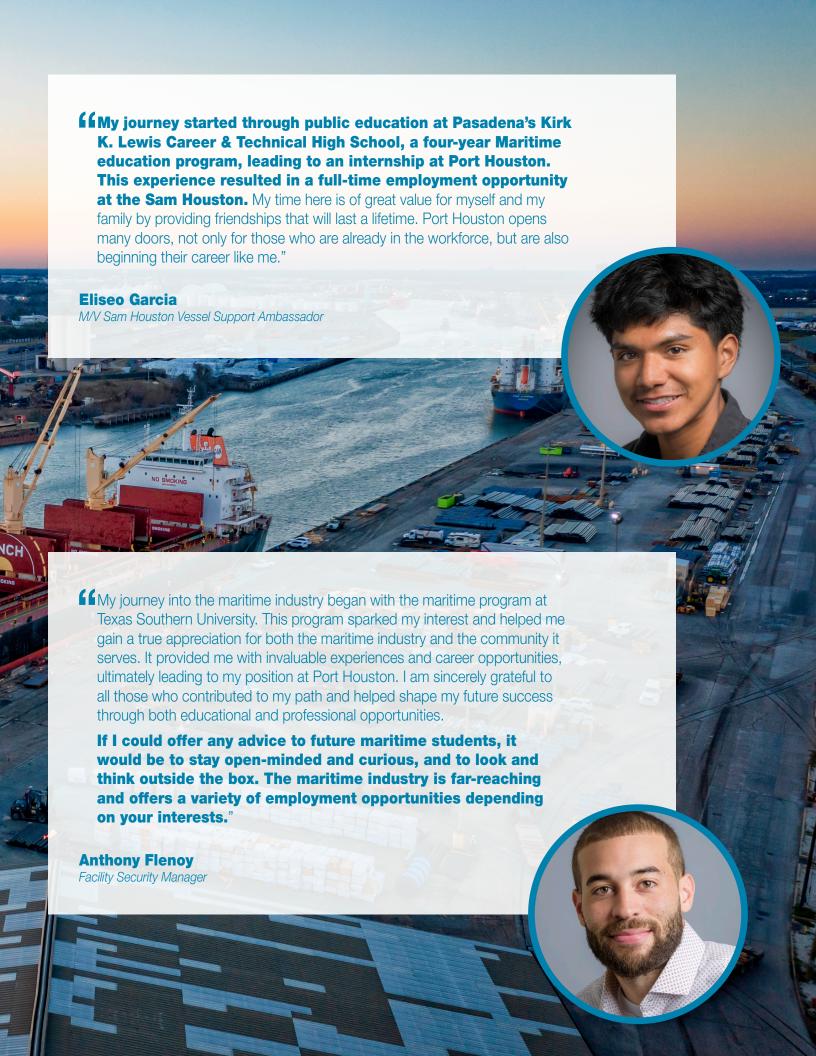












To learn more about Port Houston's Education Outreach initiatives, please contact:

**Call** 713-670-2806

**Email** MaritimeEd@porthouston.com

www.porthouston.com

