

# San Diego Blue Technology

**Promoting Sustainable**

**Science-based**

**Ocean and water industries**



Presented by Linda Kurokawa

# Blue Tech San Diego

San Diego has the largest concentrated maritime technology cluster in the U.S. And probably the world.

Blue Tech represents a diversity of jobs, from blue-collar manufacturing to PhD-level research.

The industry tackles our greatest challenges, like:

Drinking  
Water

Sustainable  
Food

Conservation

Research



# Types of Blue Technology

- Aquaculture and Fishing
- Biomedicine
- Cables and Connectors
- Desalination and Water Treatment
- Boats & Shipbuilding
- Ocean Energy and Minerals
- Ocean Science and Observation
- Ports and Marine Transportation
- Telecommunications
- Floating Platforms
- Weather and Climate Science
- Robotics (Manufacturing & Science)
- Unmanned Systems ( UUV &Drones)



## Just *SOME* of the occupations needed for the Blue Economy . . .

- Video Engineer \*
- Mapping Specialist
- ROV Pilot \*
- Communications Specialist \*
- ROV Engineers and Fabricators
- Navigation Specialist
- Deck Chief \*
- Engineering Technicians \*
- Data Engineer
- Sonar Technician \*
- Computer Specialist \*
- Ocean Scientists (Geological, chemical, physical)
- Marine Biologist
- Dive Master \*
- Welder \*
- Electricians \*
- Mechanic \*
- Mechanical Engineer
- Archeologist
- Shipboard Chef \*
- Medic
- Deck hand \*

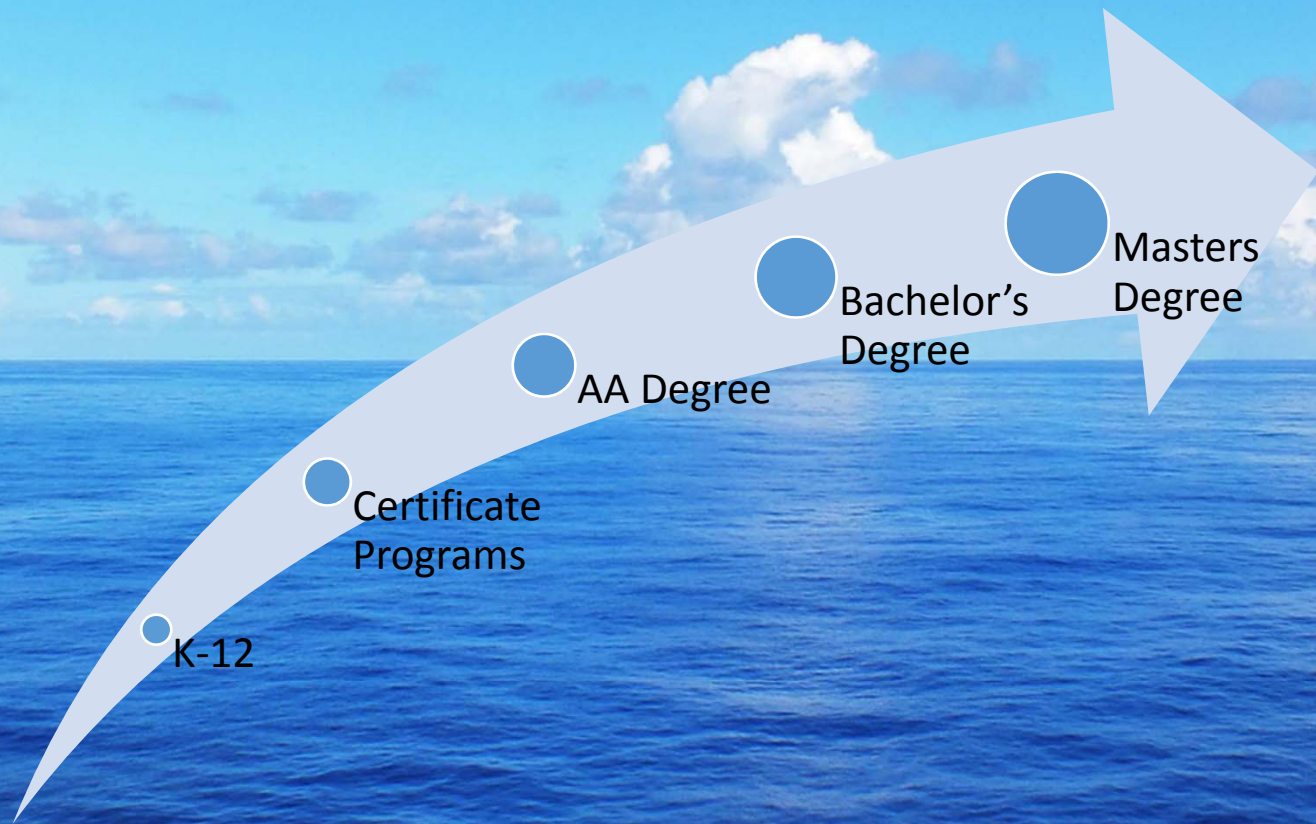


# What about the future . . .

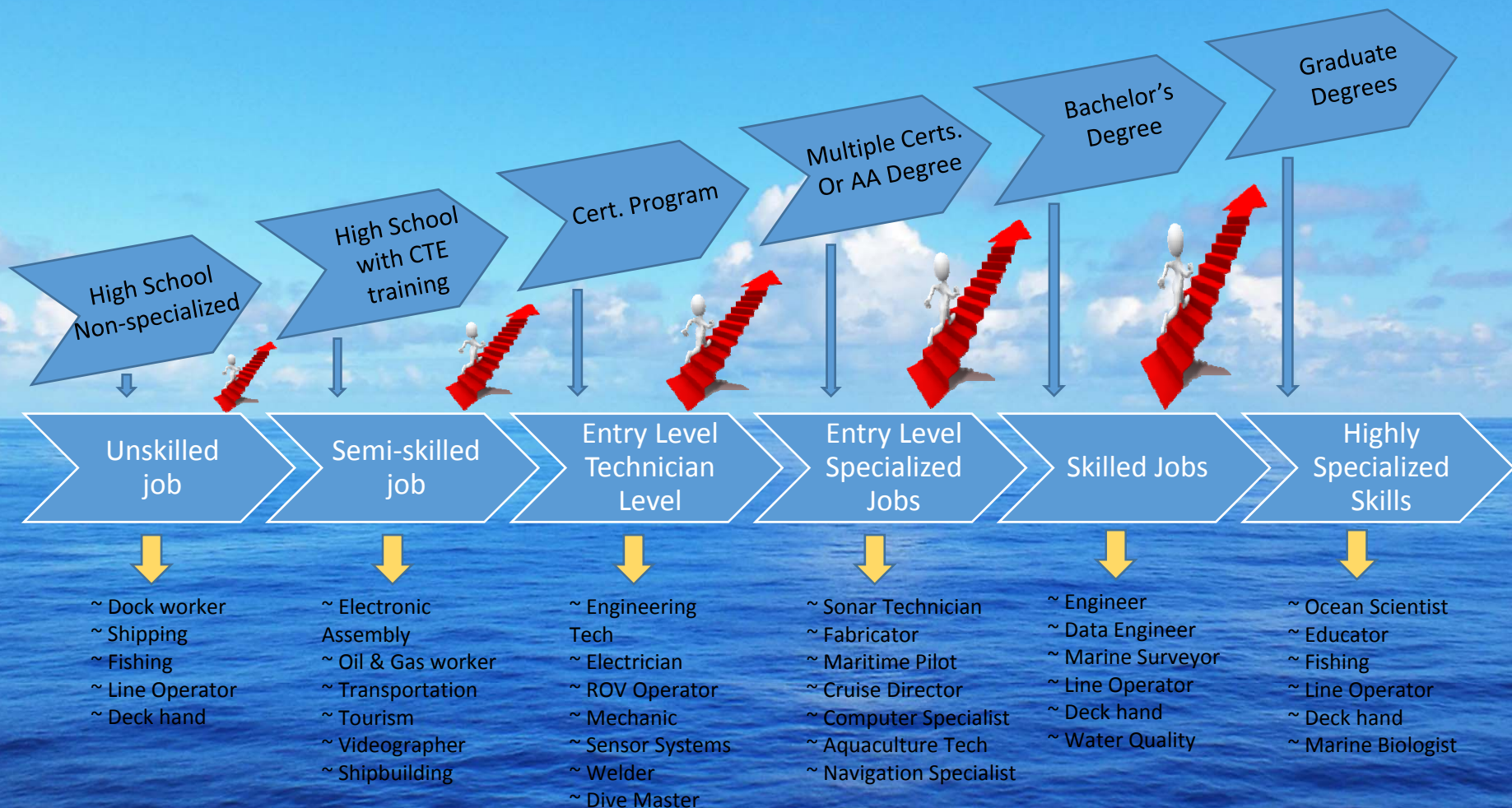




What are the educational pathways needed for the careers we just talked about?



# Blue Tech Pathways





# Success in the New Economy

What current data is showing is that success in the new economy is as much about acquiring the knowledge, skills and abilities needed for in-demand occupations as it is to be well educated. Both paths *may* work, but

Education combined with Technical Training  
is how to ultimately secure a competitive advantage  
in the new economy.



# MiraCosta's Technology Training Center



Technology Career Institute



It is a place where high school graduates, unemployed, underemployed and veterans can get trained quickly and transfer right into vacant jobs or continue their education for further advancement





# Why and how we created TCI:

Industry, EDCs and NTMA desperately needed machinists, in a hurry!!

Phase 1 – complete machinist program

Phase 2 – create larger training center (TCI) adding more machines and **Blue Tech** programs + incumbent worker training

Phase 3 – Grants to fund equipment and tuitions.

Phase 4 – Purchase our own larger building through private donation and industry profit sharing



# What is different about the type of education offered at TCI?

- Career readiness preparation
- **Accelerated FOCUSED** Skills training
  - Industry focused and guided
  - Broad based
  - Analytic, critical thinking
- Leadership Training
- Lean
- Creative collaboration with:
  - High schools
  - Other Community colleges
  - Universities
  - Apprenticeships
  - OJT.
- Programs lead to certificates not credit.



# Statistics

- 90 - 95% Completion rate
- 90 - 94% Employment rate within 3 months post graduation
- Students can expect to earn approximately \$18 - \$25 per hour to start
- Average age – 34
- 80% men, but changing each year with more women
- Setting the **GOLD** standard with a MiraCosta Certificate



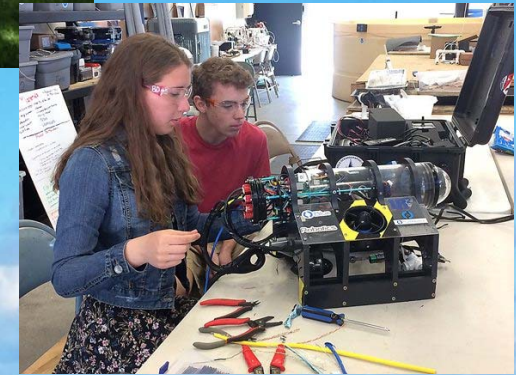
# What's at TCI?

## Blue Tech:

- Engineering Technician
- Machining Technology
- Unmanned Systems (ROV/Drone) Technician
- Scuba Diving Instructor

## Other:

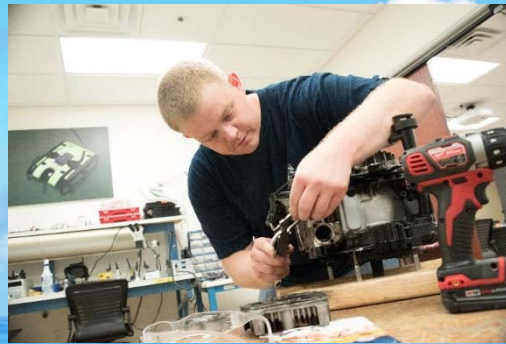
- Advanced Manufacturing Courses
- Biomedical Equipment Technician
- Craft Brewing Technician
- High Level Security Courses
- Phlebotomy Certification
- Veterinary Assistant
- Welding Certification





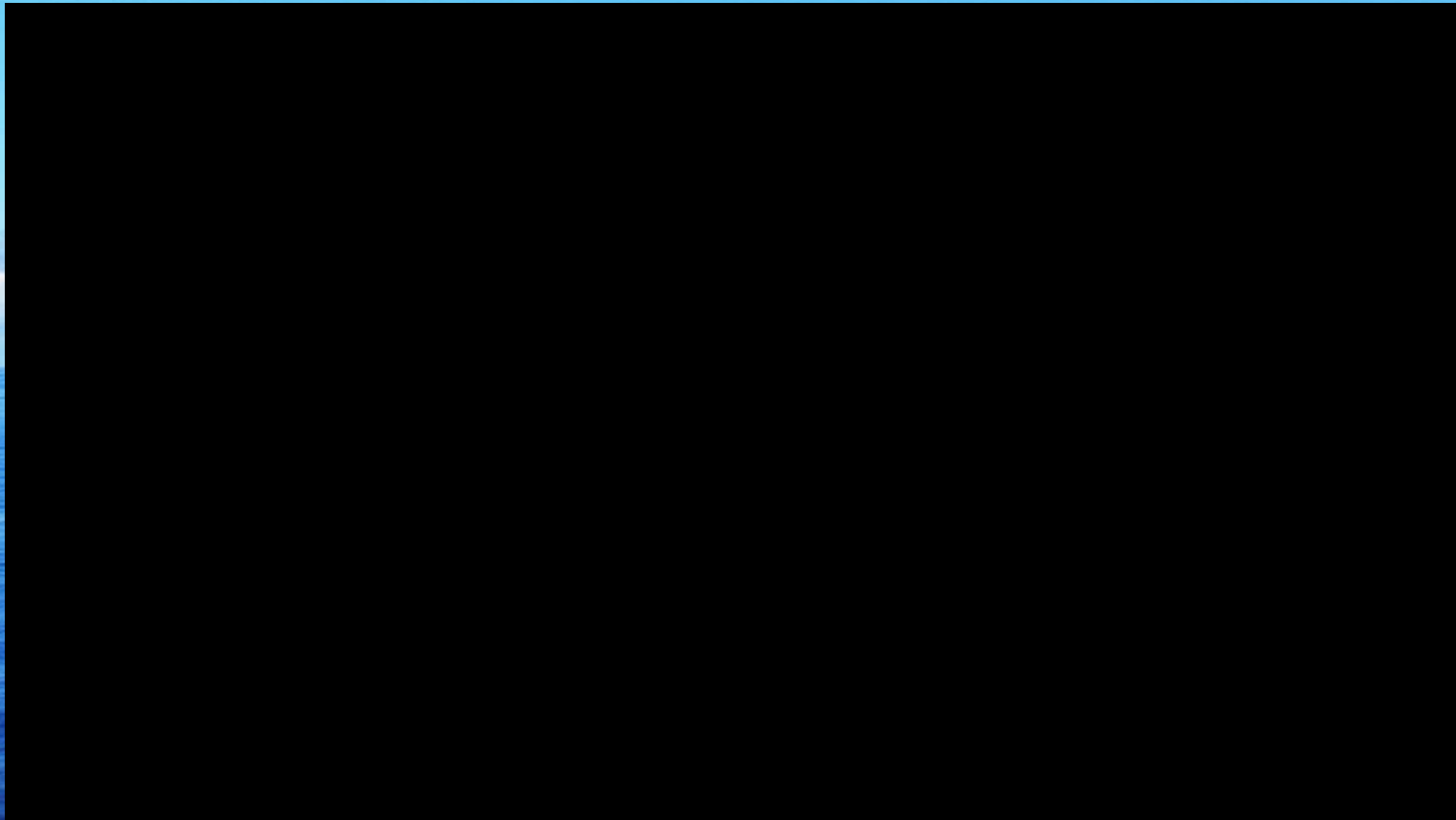
# Engineering Technician:

486 instructional hours





# Engineering Technician:





# Unmanned Systems (ROV/DRONE) Technician

486 instructional hours





# Machinist Technology:

487 instructional hours





# Scuba Diving Instructor Training

- In partnership with a Dive Shop
- GI Bill Approved – the only one in the Western U.S.





# Employee Training





# What students can expect

- TREAT TRAINING LIKE EMPLOYMENT!!!
- Communication with the instructor!!
- Career Readiness Bootcamp
- Job Shadow, Industry Tours, Guest Speakers
- Work Skill Navigator support throughout program and after graduation
- Possible internships, apprenticeships



# Student Support



We care about making student successful.

- ✓ Financial assistance for course fee, transportation, rent, minor car repair and childcare.
- ✓ Food Pantry
- ✓ Resume writing and review assistance
- ✓ Job Board, leads for employment
- ✓ A kind staff member to listen



# Contact Information

Linda Kurokawa

Executive Director, Community Education & Workforce Development

MiraCosta College

Email: [lkurokawa@miracosta.edu](mailto:lkurokawa@miracosta.edu)

Phone: (760)795-6824

Website: [tci.miracosta.edu](http://tci.miracosta.edu)



QUESTIONS ?

