

The Maritime Industry is the SMART Choice

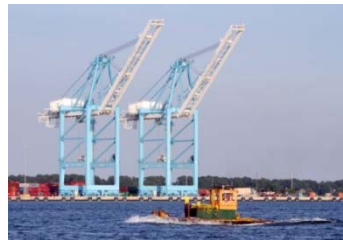
March 3, 2016

The SMART Center

The Southeast Maritime and Transportation Center

A National Science Foundations Advance Technology Education Center

Barbara Murray, SMART Center Executive Director and Principal Investigator (PI)



The SMART Center

Partners with Industry for the 21st Century Workforce

- The SMART Center is a National Science Foundation Advanced Technological Education (NSF ATE) Center focused on careers in the Maritime industry – anchored in people, partnerships and pathways.
- The maritime and transportation **industry needs tens of thousands of skilled, educated workers** in the employment pipeline to fill important middle-skill technician jobs over the next decade to sustain the industry

SMART - Leaders in providing Maritime Technologies Pathways utilizing stackable credentials



Megan was a community college student who found a rewarding career in the maritime and transportation industry. Read her story at: www.maritime-technology.org

WHAT WE DO



VOICES OF INDUSTRY

“Our partnership with the SMART Center has resulted in unique programs that benefit not only our company but the industry as a whole. It is helping us educate and equip more of today’s students and tomorrow’s workers with the skills, experience, and education they need to succeed.”

-Brad Mason

Director of Operations MMR, AMSEC



Maritime Ship Building and Repair

SMART

SOUTHEAST MARITIME AND TRANSPORTATION CENTER



Make the SMART Choice



www.maritime-technology.org



The SMART Center Goals



1. Maritime Career Awareness & Pathways

2. Identify Industry Standards for Curriculum based on registered apprenticeship/ stackable credentials model

3. Professional Development (SMART Institute Model and Educator Credentials)

4. Model Effective Industry and Education Partnerships



4 Maritime Industry Segments

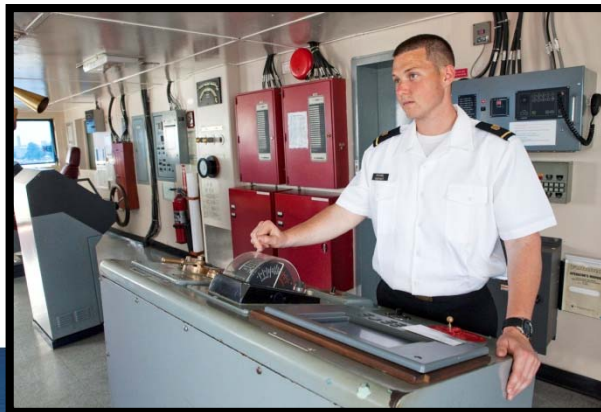
**Ports and
logistics**



**Ship building
and ship repair**



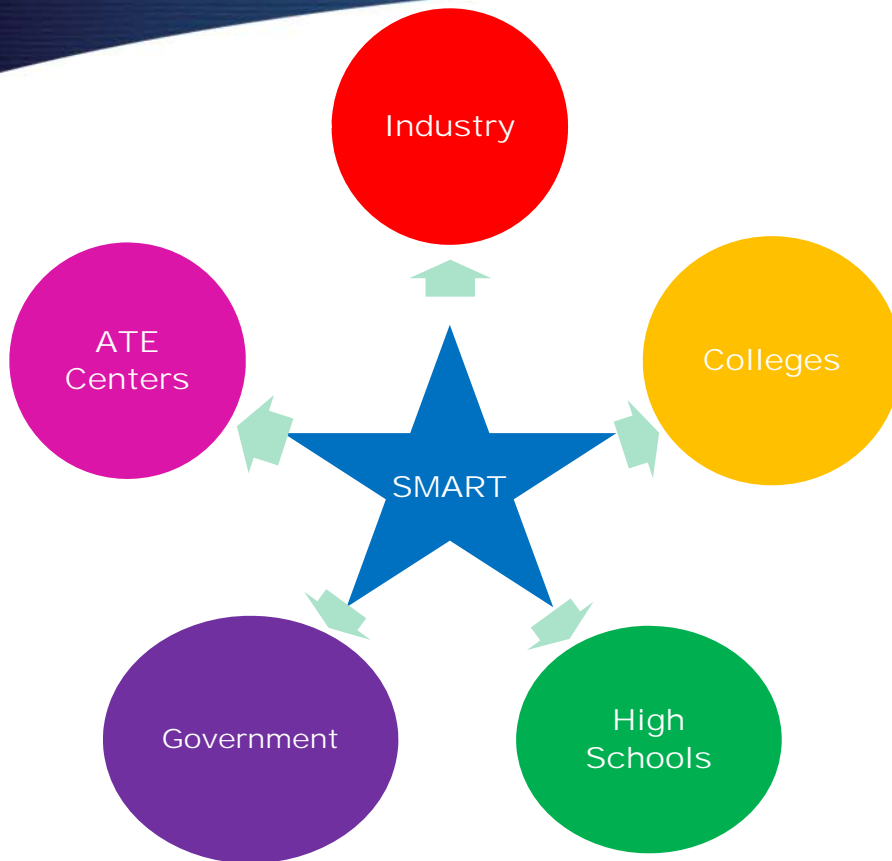
**Vessel
Operations**



**Emerging
Technologies**



Regional and National Partnerships





A Subsidiary of Huntington Ingalls Industries



AMERICAN SOCIETY OF TRANSPORTATION AND LOGISTICS



JACKSONVILLE PORT AUTHORITY



THE PORT OF VIRGINIA



RACC



REGISTERED APPRENTICESHIP

Earn. Learn. Succeed.



The National Center for Welding Education and Training



Newport News Shipbuilding
A Division of Huntington Ingalls Industries



Naval Facilities Engineering Command



Eastern Shore Community College



Lorain County Community College



FLORIDA STATE COLLEGE at Jacksonville



EDMONDS COMMUNITY COLLEGE



SOUTHEAST MARITIME AND TRANSPORTATION CENTER



COLONNA'S SHIPYARD, INC.



Anne Arundel Community College



TIDEWATER COMMUNITY COLLEGE
From here, go anywhere.™



SAN JACINTO COLLEGE



A.M.H.



SAN DIEGO COLLEGE
sdcity.edu ... Since 1914



Thomas Nelson COMMUNITY COLLEGE



Mississippi Gulf Coast Community College



COLLINS MACHINE WORKS



Rappahannock Community College



Paul D. Camp Community College
Franklin · Suffolk · Smithfield



MARITIME INSTITUTE OF TECHNOLOGY & GRADUATE STUDIES



NORFOLK NAVAL SHIPYARD



NAUTICUS



OLD DOMINION UNIVERSITY



THE UNIVERSITY of WISCONSIN
MADISON



GENERAL DYNAMICS



Huntington Ingalls Industries



OCEAN MARINE YACHT CENTER

SMART Industry Partners Represent Over...

150,000



Employees



Industry Careers



Shipbuilding / Ship Repair



Dimensional Control,
Nuclear Welder,
Welding Inspector,
Non-Dest. Testing,
Designer, HVAC
Technician

Welder, Ship
Fitter, Pipe Fitter,
Marine Electrician,
Inside Machinist,
Outside Machinist,
Painter, Insulator,
Rigger, Dock
Master, Carpenter,
Blacksmith

SB

SR

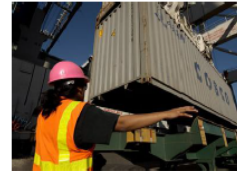
Sea-Going



Masters,
Chief Engineers,
Chief Officers,
2nd Engineers,
Electro Technical
Officers (ETO)

Able Bodied
Seaman
Machinist
Ship's Utility
Steward
Messperson
Deckhand

Ports / Logistics



Longshoremen,
Stevedores,
Crane & Tower
Operators,
Forklift
Operators, Cargo
& Freight Agents,
Security, Import /
Export
Managers, Risk
Assessment,
Engineers,
Logistician,
Network
Technicians

Emerging Technologies



Off-Shore Wind has the
potential to increase in
positions in all other
maritime sectors due to
manufacturing,
installation, transportation
and maintenance of wind
turbines

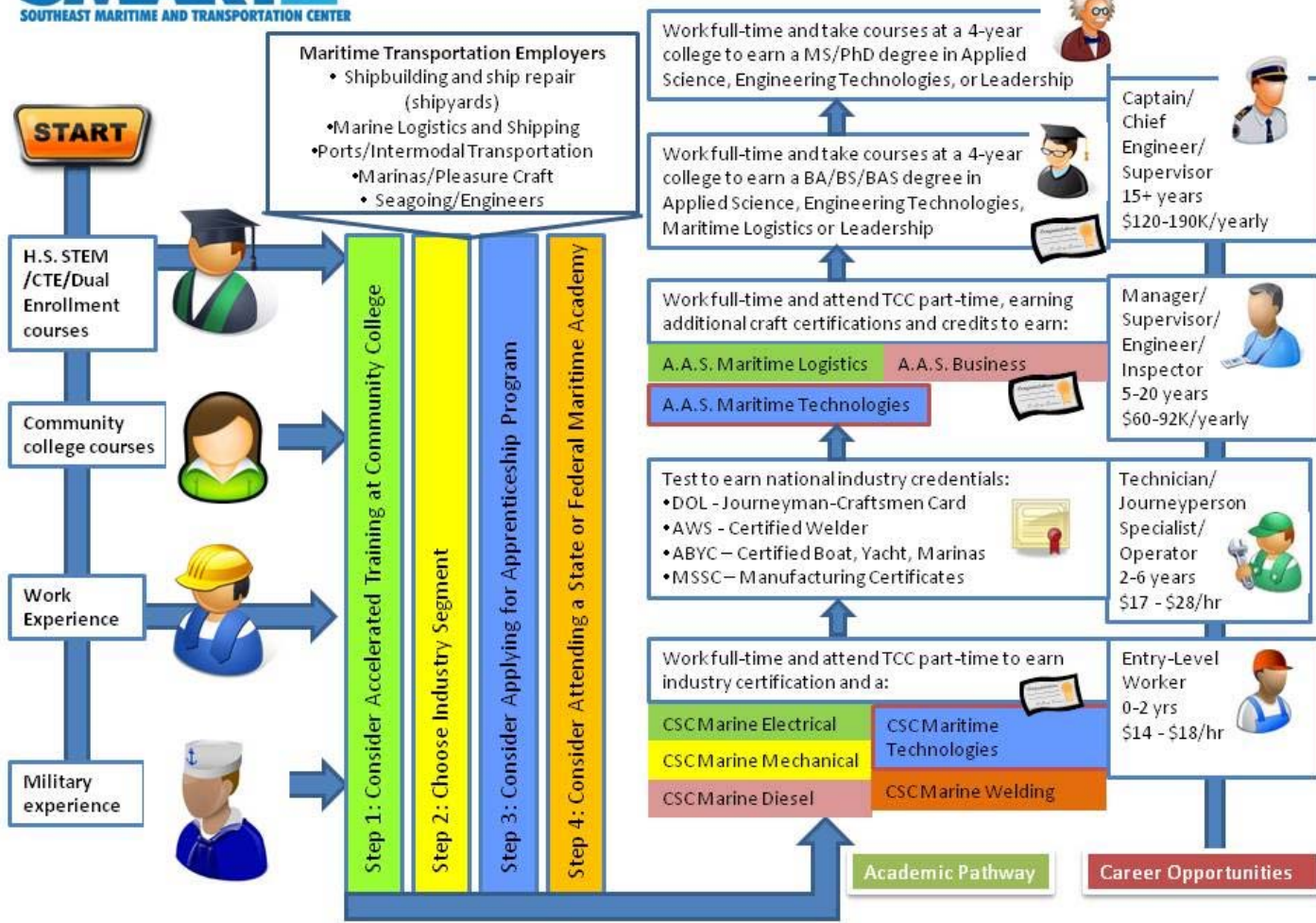


SMART

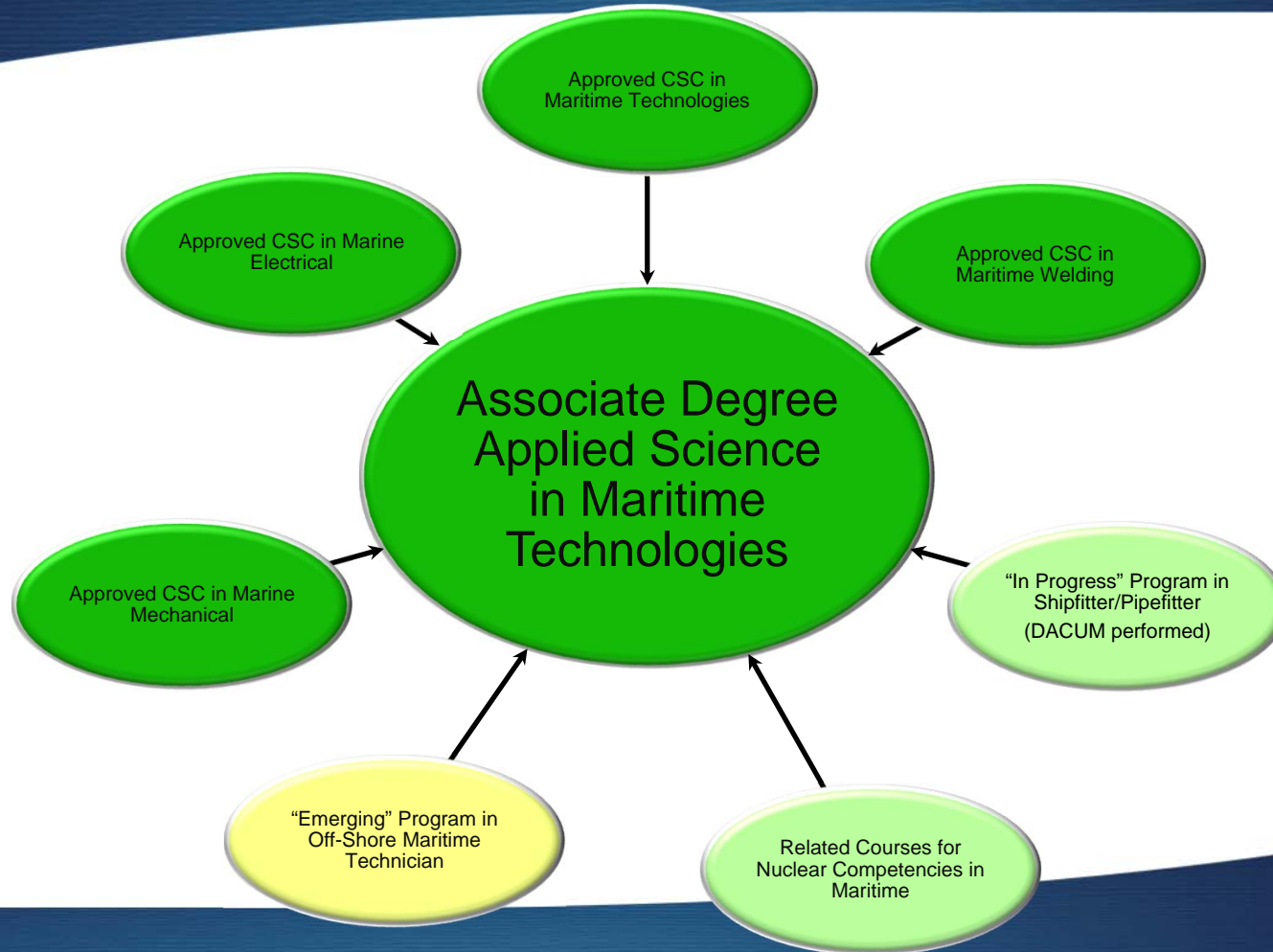
SOUTHEAST MARITIME AND TRANSPORTATION CENTER



Your Maritime and Transportation Industry Career Pathway



SMART Maritime Technologies Career Pathway



Maritime Technologies AAS & CSC



MARITIME TECHNOLOGIES Tidewater Community College 2013-2014

Associate of Applied Science Degree:

- Maritime Technologies

Career Studies Certificates:

- Marine Electrical
- Marine Mechanical
- Maritime Technologies
- Maritime Welding (listed with Welding program options in the catalog)

SEMESTER 1 (Based on a Fall semester start)			
Course No.	Course Title	Credits	Prerequisite
CAD 160	Machine Blueprint Reading	3	
ENG 111	College Composition I	3	Placement
ITE 115	Introduction to Computer Applications and Concepts	4	
MAR 120	Introduction to Ship Systems	3	
SDV 101	Orientation to Maritime Careers	1	
	Approved Mathematics Elective ²	3	Placement
	SEMESTER TOTAL	17	

SEMESTER 2			
Course No.	Course Title	Credits	Prerequisite
CAD 201	Computer Aided Drafting and Design I	4	
ENG 115	Technical Writing	3	Placement
SAF 126	Principles of Industrial Safety	3	
	Approved Mathematics Elective ²	3	Placement
	Approved Elective ³	3	
	SEMESTER TOTAL	16	

SEMESTER 3			
Course No.	Course Title	Credits	Prerequisite
IND 101	Quality Assurance Technology I	3	
MAR 297	Cooperative Education	3	
	Approved Elective ³	3	
	Approved Elective ³	3	
	Humanities Elective ¹	3	
	Social Science Elective ¹	3	
	SEMESTER TOTAL	18	

SEMESTER 4			
Course No.	Course Title	Credits	Prerequisite
HLT 105	Cardiopulmonary Resuscitation	1	
IND 137	Team Concepts and Problem Solving	3	
MAR 297	Cooperative Education	3	
	Approved Elective ³	3	
	Approved Elective ³	3	
	Social Science Elective ¹	3	
	SEMESTER TOTAL	16	

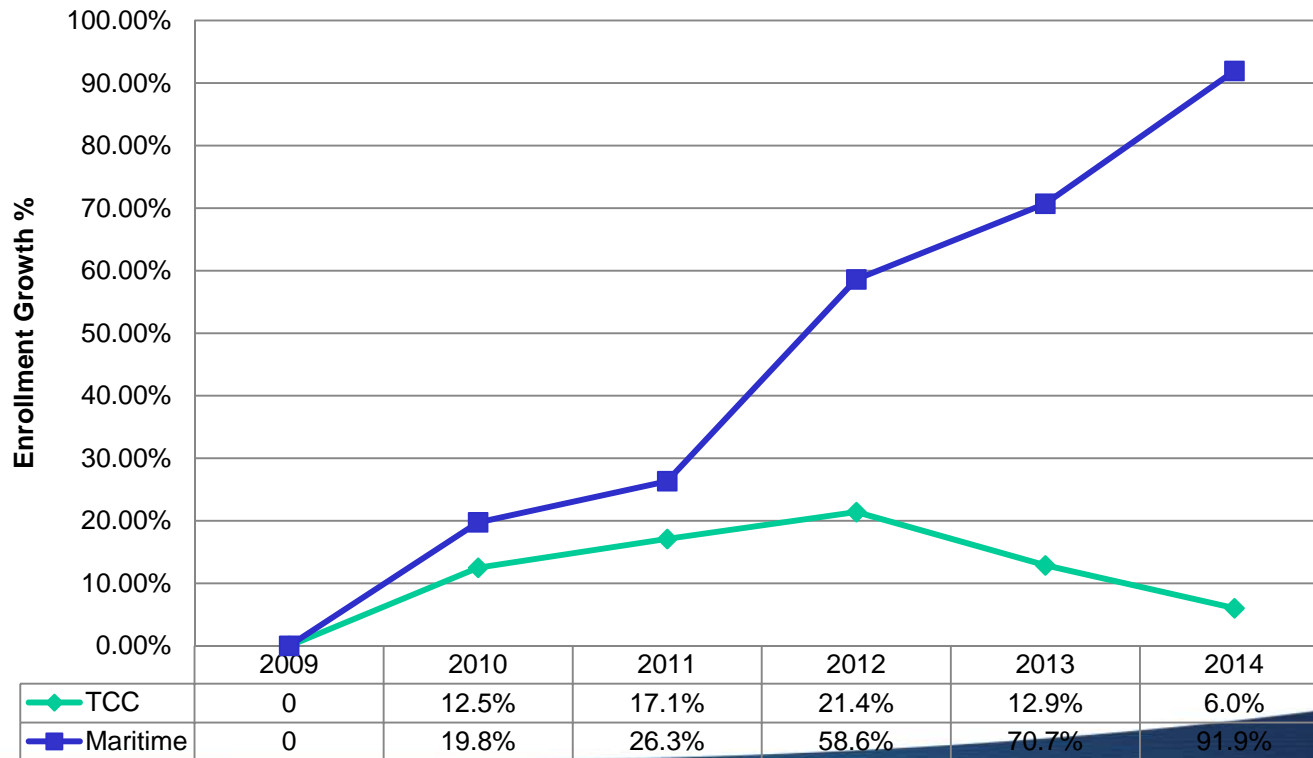


Maritime Enrollment Growth at TCC



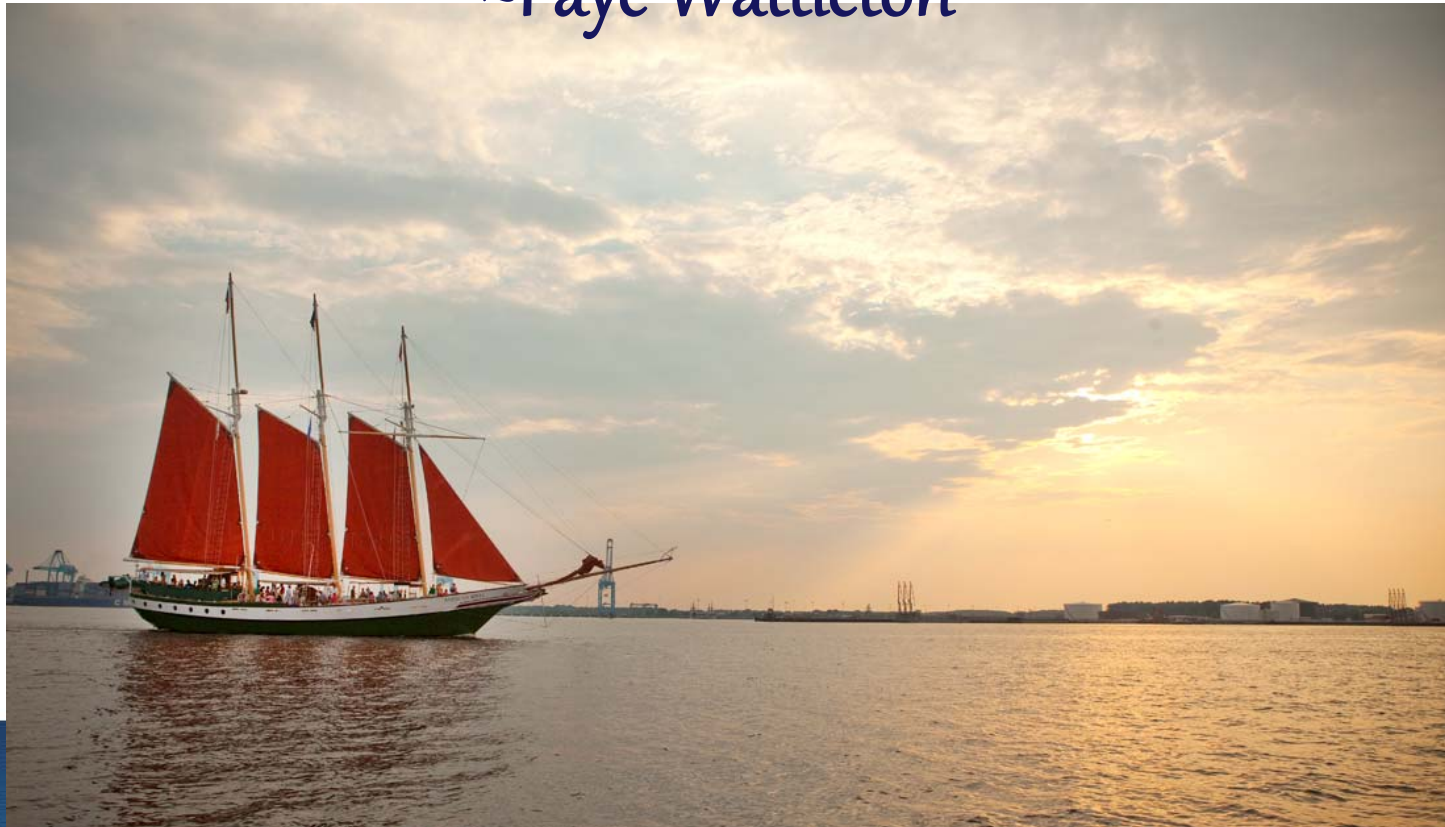
Enrollment Growth for Maritime Pathways Courses

Percent Growth since 2009



The only safe ship in a storm is leadership.

~Faye Wattleton



We are here for you!

Barbara Murray
Executive Director and Principal Investigator (PI)
SMART Center
1800 College Crescent, Suite 140
Virginia Beach, VA 23453
(757) 822-7485
bmurray@tcc.edu

www.maritime-technology.org

