



ATECENTERS

Internships and Apprenticeships

August 18, 2016



Webinar Details

- For this webinar you will be in listen only mode using your computer or phone
- Please ask questions via the question window
- This webinar is being recorded – you will be sent a recording link

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With Additional Support by the ATE Collaborative Impact Project

ATECENTERS

Disclaimer: This material is based upon work supported by the National Science Foundation under Grants # 1205077 and # 1261893. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

The CCTA IS Led By



- **National Center for Convergence Technology (CTC)** at Collin College in Frisco, TX (lead)
- **South Carolina ATE National Resource Center (SCATE)** at Florence Darlington Technical College in Florence, SC
- **Florida ATE Center (FLATE)** at Hillsborough Community College in Tampa, FL
- **Bio-Link Next Generation National ATE Center for Biotechnology and Life Sciences (Bio-Link)** at City College of San Francisco in San Francisco, CA
- **Networks Resource Center** at the Maricopa Community College District in Phoenix, AZ

CCTA Purpose

- Respond to a request from the Department of Labor (DOL) to the NSF to have ATE Centers provide technical assistance services to DOL TAACCCT grantees
- Activities relevant for DOL grants, NSF grants and workforce-oriented programs of all kinds
- Deliverables
 - Topical webinars on existing and new solutions
 - Live/recorded with attendee Q&A
 - Identify and document best practices
 - Host convenings

TODAY'S PRESENTERS



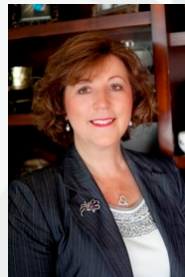
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SC ATE Center
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Executive Director & PI
SMART Center
Presenter: Apprenticeships



Lois McIntosh
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Consulting,
Discussant

Internships



- ✓ Internship Elements
- ✓ The South Carolina ATE Model

Purpose

Design

Program Review/Feedback

Internship Elements

- Disciplines & Qualifications
- Time of Year & Duration

The average internship lasts about a semester (four months)/ or summer.

- Hours

Some internships are full-time, most range from 10 - 30 hours per week

- Paid/Unpaid

Can be paid (preferably) or unpaid (typically), Normally, an intern does not receive employee or retirement benefits. The [U.S. Department of Labor's Fact Sheet #71: Internship Programs Under the Fair Labor Standards Act](#) provides guidance regarding whether your interns should be paid the minimum wage.

- Credit/Not-for-Credit

Can be for credit or not for credit, or any combination of paid/unpaid and credit or not for credit. Internships for-credit should include input from a faculty adviser or academic counselor.

- Insurance/Benefits

Insurance/ benefits packages sometimes are offered through employer. This is more exception than the rule.

- Monitoring/Evaluation

Each semester, the participating company and college faculty advisors should evaluate student intern work and academic performance. This would include work ethic, dependability, teamwork, flexibility, communication skills, organizational skills, overall performance on the job.



SC ATE Internship and Industry Consortium Model



Our Premise/Purpose:

- **Makes learning relevant**

ATE internships provides the student with a unique opportunity to gain academic and practical experience simultaneously

- **Promotes student employability**
- **Employers build their own future workforce**

Through the ATE Internship the College and participating industries prepare students for rewarding careers as highly skilled technicians through a cooperative arrangement that combines classroom theory with practical, on-the-job experiences in their industry

- **Industry consortium bylaws level the playing field**

Area industries and the College collaborate in the on-going development, implementation, and evaluation of internship requirements. Industry drives Consortium Policy and Guidelines

- **College provides flexibility to align with industry needs** Talk more about this later (Scheduling, coursework sequences etc)

Internship and Industry Consortium Model



Industry partnership elements:

- **Employers within consortium define the program parameters (all day, year round, pay etc.)**

Industry Consortium members participate directly in the student screening and selection process, review of resume's. They also determine maximum pay, recommended/established Tues/Thursday student work schedule. Industry drives parameters and dictates their needs, college adjusts to that need.

- **Starting pay for all Industry Consortium members is equal**

Each company will start the Interns at same per hour rate for all internships. Company has latitude to increase after first (3) months of internship (Non compete wage statement). Since not tied to academic credit so can be for extended periods of time.

- **Participating companies agree not to hire prior to graduation from FDTC**

Providing paid, work experience in a related field through time of graduation.

Internship and Industry Model



Industry Collaboration:

- **Essential**

Provides qualified individuals for area industries through an on-going, proven process of selecting, training, and promoting high-quality technicians. Industry dictates needs and when you meet those needs they will continue to come back to the college for filling those needs so the model is SUSTAINABLE. We host a Industry Consortium each year to review history, bylaws, guidelines and recruit new industries to the table (Each Fall) This year combined with internship recruitment fair.

- **Sustainable**

ATE Internships enable any deserving student to obtain an associate degree in selected engineering and industrial technology fields regardless of the student's financial status by providing paid cooperative work experiences. Companies agree to notify ATE interns of any full-time employment opportunities, based on company needs most of the time leading to long term sustainable employment

- **Flexible**

Incorporates essential knowledge, skills, and experiences into a coordinated sequence of academic courses and on-the-job training. Provides alternative educational experiences for academically qualified individuals entering technical careers in our area.

Internship and Industry Cons Model



ATE Student Intern Qualifications:

- **Disciplines**

Computer Technology/Network Systems Management, Industrial Technology, or Engineering Technology

- **GPA Requirements**

An ATE Scholar is expected to maintain a minimum GPA of 2.50

- **Hours-Work-Flexibility**

The participating student attends class approximately twenty hours each week and works at his or her company fifteen to twenty hours per week. Additional work hours are contingent upon the company's need and student GPA.

Internship and Industry Consortium Model



How the SC ATE Center/FDTC Internship Works

- **Paid internships – not tied to academic credit**

ATE Internships are paid and students at this time receive no additional credit hours

- **Course scheduling by the college to accommodate T & Th full-day internship work.**

ATE Internship students course work is scheduled in a sequence and timing that allows for internship/work opportunities (ie....Course sequence is M-W-F and work (internship is scheduled with consortium members for T-TH. (relationships with faculty are key)

- **Duration – can begin in 2nd semester & continue through graduation**

ATE Internships are year round starting as early as the students second semester. Eliminates any restrictions of duration of any internships

- **Hours limited to 20/wk. (exceptions only if GPA>3.0)**

Students must maintain a GPA level of 3.00 or better to be eligible to work over twenty (20) hours per week while school is in session.

SC Internship and Industry Consortium Model



How the SC ATE Center/FDTC Internship Works

- **Benefits/Insurance – depends on company & how student is paid**
 - College student insurance covers work-based learning (Liability etc)
 - Other benefits only if employer provides (Very rare for this to occur)

- **Payment methods**

Industry hires/pays intern directly

Intern hired through an employment agency or third party hiring agency. Usually this seems to be short term and then looks for longer term employment need (1st ~ 3 mo.)

- **Intern paid via stipend donation to FDTC Foundation**

SC ATE Internship and Industry Consortium Model



FDTC Foundation Payment Option:

- Paid a stipend at hourly rate for hours worked
- Paid bi-weekly

SC ATE provide monthly time/pay sheets

- Students receive 1099 at year end
- Foundation staff
 - Facilitate security background checks
 - Arrange for drug screening
 - Pay interns
 - Invoices employers for intern payments and service charge
- Service Charges go to the ATE account in the Foundation to support student recruitment, ATE student activities, and SC ATE Industry Consortium meeting expenses and sustainability needs.



SC Internship and Industry Consortium Model



College Flexibility and Support:

- **Managed by college staff in SC ATE Center**

Resume Review with students, Assistance with resume screening for industry partners, Interview scheduling, Pre-employment services in conjunction with FDTC Foundation, (ATE MOA, Drug Screening, time sheets), tours of industry facilities and appropriate record keeping for each student intern.

- **Collaboration with faculty & employers**
- **Coordinated with other benefits for ATE Students**
- **Evaluation**

Each semester, the participating company and Florence-Darlington Technical evaluate ATE interns work and academic performance. Usually also involves internship on site at least one time per semester. Evaluating those areas previously mentioned.



Internship and Industry Consortium Model



- Students
 - Provides paid work experience in a related field
 - Provides better-than-minimum wage employment
 - High %-Leads to employment after graduation
- Employers
 - Expanded access to engineering/industrial technicians
 - Opportunity to screen and select interns
 - Flexible-length internships
 - Opportunity to grow a future, job-ready workforce

 Cost-effective public-private partnership that supports economic development



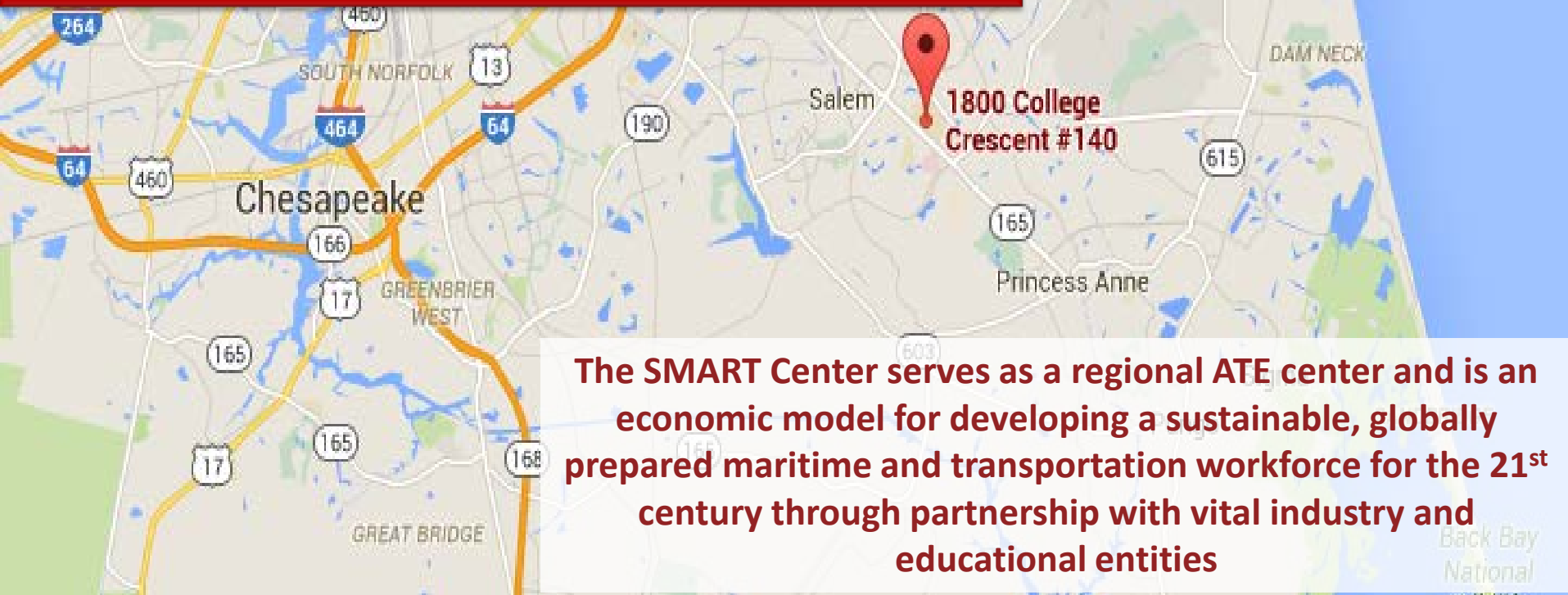
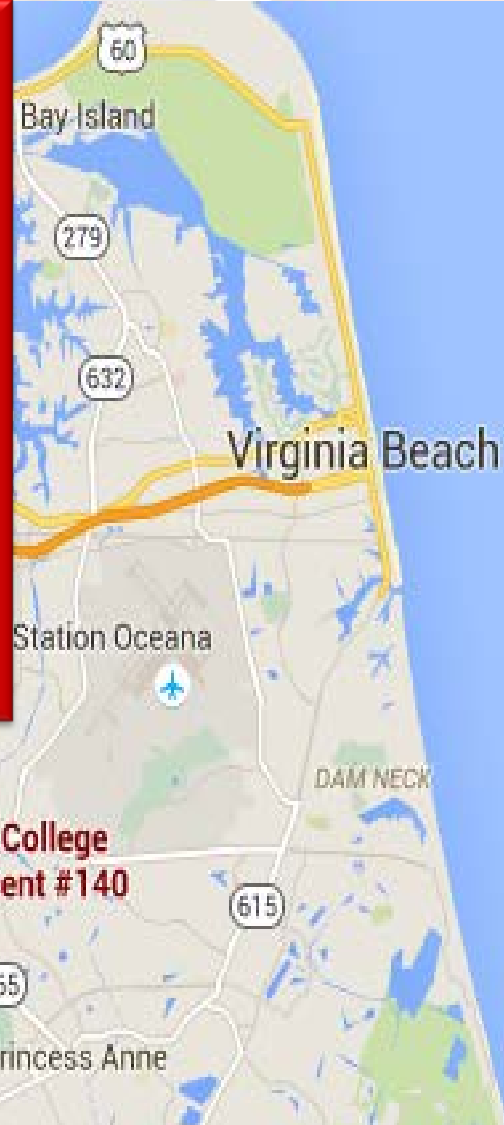
Barbara Murray

The SMART Center

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The SMART Center serves as a regional ATE center and is an economic model for developing a sustainable, globally prepared maritime and transportation workforce for the 21st century through partnership with vital industry and educational entities

Apprentices

National Growth Chart



What is registered apprenticeship?



Employer
Involvement



Structured
On-the-Job
Learning



Related
Training and
Instruction



Rewards for
Skill Gains



National
Occupational
Credential

Five Core Components of
Registered Apprenticeship

Registered Apprenticeship Facts and Figures

Did You Know?

150,000

Employers and Labor Management Organizations Participate in Registered Apprenticeship.

400,000

Registered Apprenticeships Nationwide in More than 1,000 Occupations.

\$50,000

Average Starting Salary of Apprentices Per Year While Earning a Credential Equivalent to a 2 or 4 Year College Degree

\$300,000

Amount Workers Who Complete Registered Apprenticeship Programs Earn More Over a Lifetime Than Peers

\$1.47 per \$1.00

For Every \$1 Spent on Registered Apprenticeship, Employers Get an Average of \$1.47 Back in Increased Productivity

Registered Apprenticeship By the Numbers

456,989

Current Number of Apprentices

200,000

New Apprentices in 2015

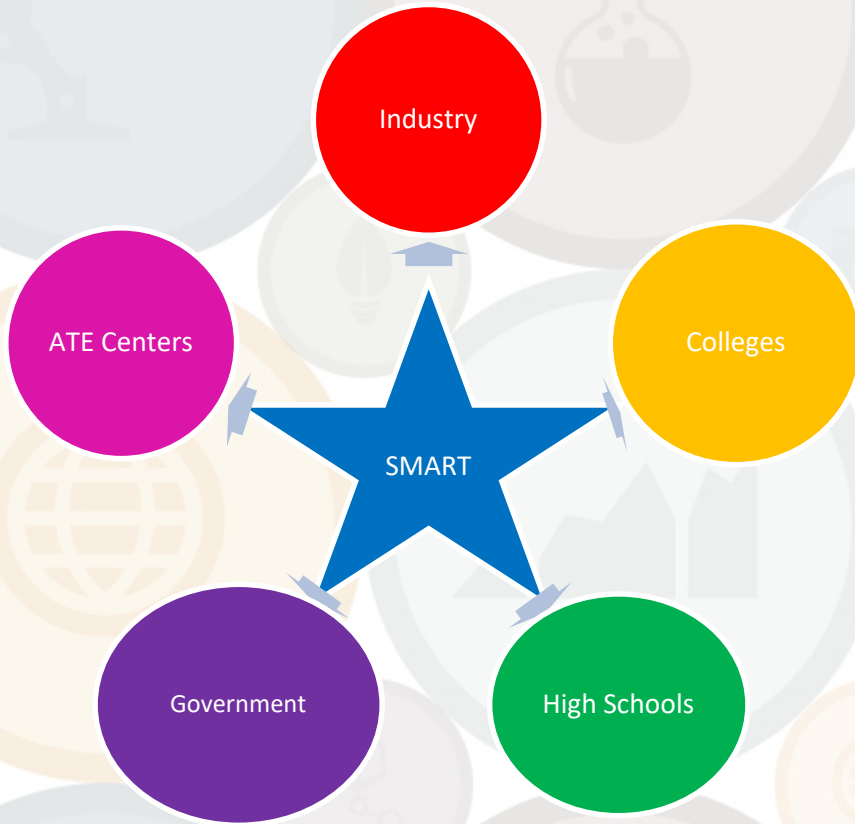
50,000

Completed Apprentices in 2015

20,000

Active Programs in 2015

Regional and National Apprenticeship Partnerships





Join RACC...





- **Job Tasks – Developed with Industry/Employers**
- **Minimum of 2,000 Hours = One Year of Training**
- **Over 1,000 Apprenticeable Occupations**
- **Real World Environment**



SMART - a National Science Foundation Advanced Technological Education (NSF ATE) Center

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New "Make the SMART Choice" Video Shows how Maritime Offers Step t...

The SMART Center has released a new installment in its "Make the SMART Choice" video series showing how today's maritime industry employers are offering workers a great pathway into stable, great-paying careers. The video tells the story of how Auxiliary Syste...

Read more about this



Billy Erwin
Machine/Shop Foreman



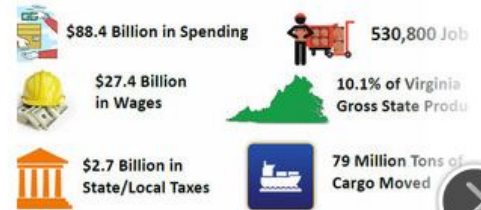
SMART Center PI, US Department of Labor Office of

Laura Ginsburg, Team Leader at the U.S. Department of Labor's Office of Apprenticeship, invited SMART Center P...



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Virginia Maritime Association Releases Economic Im...

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Why Smart?

The Southeast Maritime and Transportation (SMART) Center is the only National Science Foundation Advanced Technology Education (NSF ATE) Center solely focused on increasing the number of well-qualified, skilled technicians in the maritime and transportation industry.

Read more about SMART

Featured Careers

Ship Pilot
1) Consult maps, charts, weather reports, and navigation equipment to determine and direct ship movements.2) D...
read more

Second Mate
The second mate is responsible for maintaining the bridge navigational and communications equipment as well as

Upcoming Events

August 2016						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20						

New "Make the SMART Center"

Apprenticeship

Offering workers a great pathway into the story of how Auxiliary Systems...

Read more about this

- Careers
- Career Pathways
- Videos
- Apprenticeship
- Dual Enrollment
- Aptitude Quiz



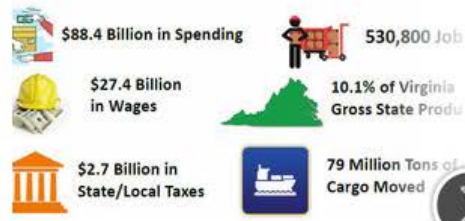
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Make the SMART Choice: Maritime Apprenticeships Lead to B...



Colter Chambers
Maritime Apprentice



0:51 / 2:31



Make the SMART Choice: Maritime Apprenticeships Lead to Broad Opportunities On and Off the Water



Why registered apprenticeship?

Build a Competitive Workforce

Employers Facing Complex Workforce Challenges in Competitive Domestic and Global Markets



Time-Tested Model

Proven Strategy for Recruiting, Training and Retaining World-Class Talent Used by Industry for Decades (and longer!)

Adaptable and Flexible

Registered Apprenticeship is a Solution and Can Be Integrated into existing Training and Human Resources Development Strategies!!!





Registered Apprenticeship Credentials



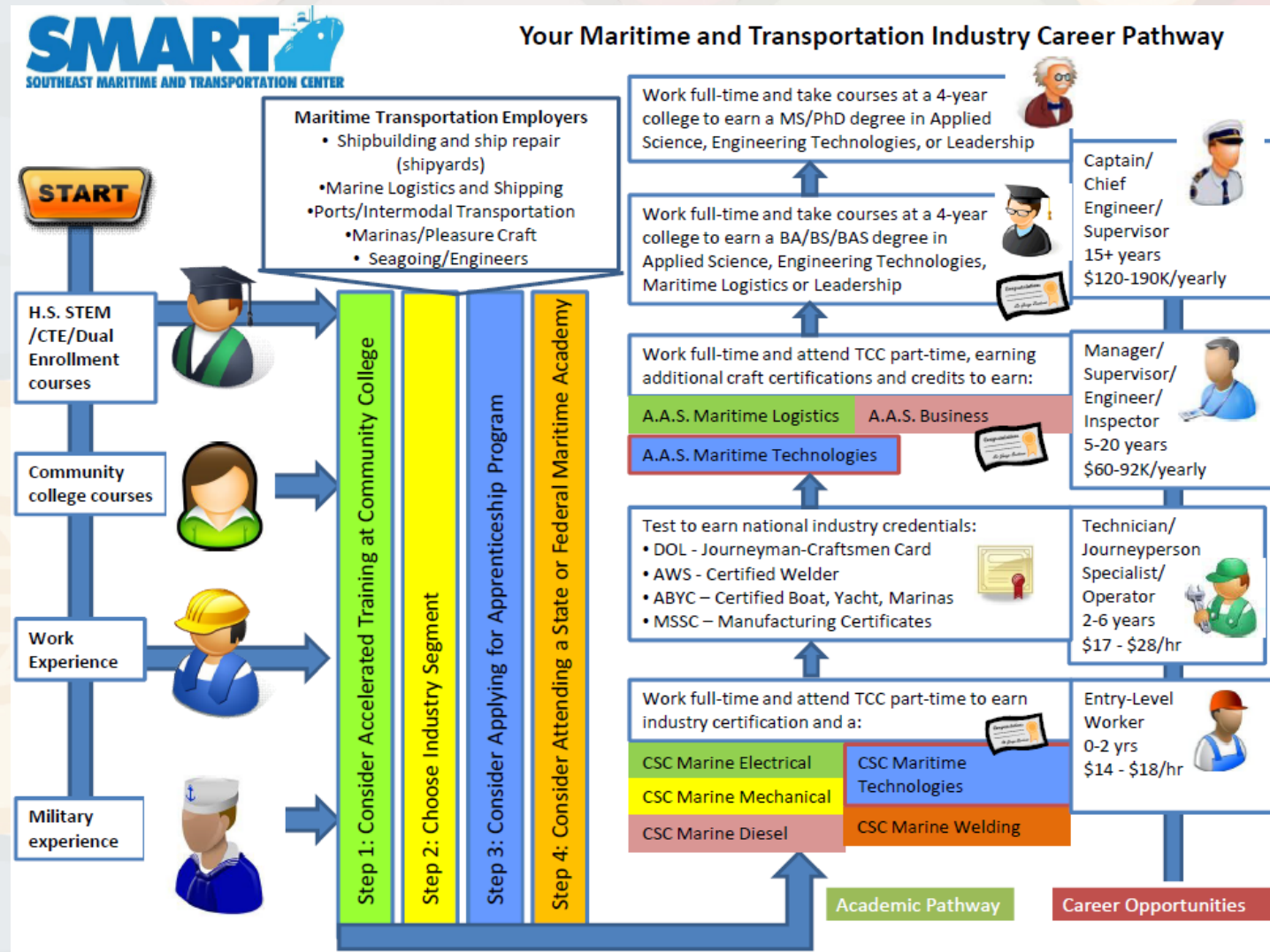
Employer Credentials

- ✓ Nationally Recognized Certificate of Registration
- ✓ National Recognition as an ApprenticeshipUSA LEADER

Apprenticeship Credentials

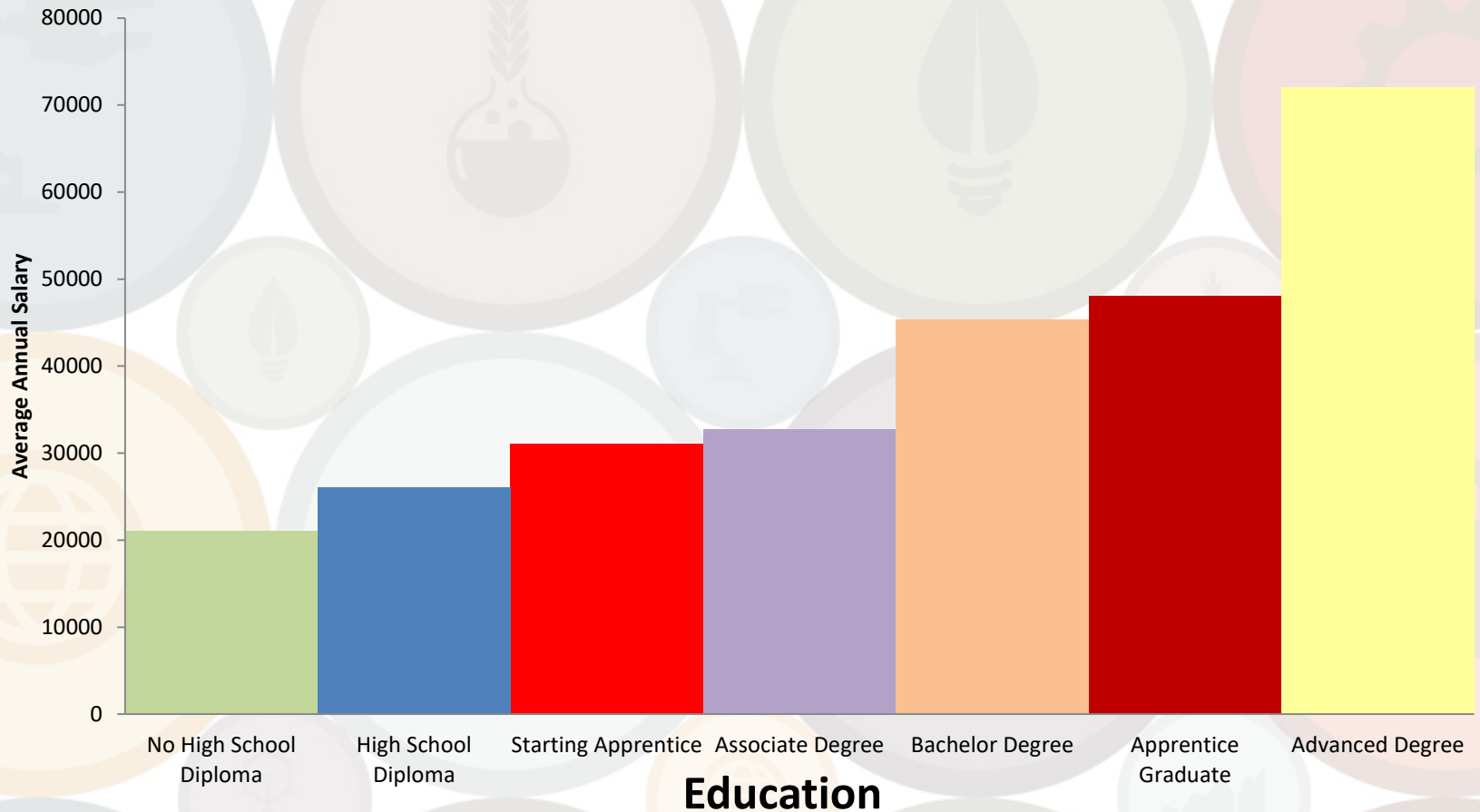
- ✓ Nationally Recognized Certificate of Completion
- ✓ Interim Credentials
- ✓ Stackable Credentials
- ✓ Opportunity to Earn College Credits, Certificates, Diplomas & Degrees

SMART Maritime Career Pathways With Registered Apprenticeship



Apprentices “earn and learn”,
resulting in higher pay from the beginning and early graduation.

Education vs. Salary ... Registered Apprenticeship



Most new apprentice graduates earn more than students graduating with a Bachelor’s degree.

Education in Maritime and Transportation Pays

Education/Experience	Maritime Jobs	Pay Range	Transportation Jobs
<i>Master's Degree / Bachelor's Degree with Experience</i>	<ul style="list-style-type: none"> • Industrial Engineer • Nuclear Engineer • Project Supervisor • Electrical Engineer • Mechanical Engineer 	\$75K - \$100K Yearly	<ul style="list-style-type: none"> • Industrial Engineer • Supply Chain Manager • Electrical Engineer • Civil Engineer • Captain
<i>Bachelor's Degree</i>	<ul style="list-style-type: none"> • Production Manager • Health & Safety Inspector • Logistics Manager 	\$60K - \$90K Yearly	<ul style="list-style-type: none"> • Transportation Manager • Distribution Center Supervisor • Ports Logistician • Ocean Engineer
<i>Registered Apprenticeship / Journeyman</i>	<ul style="list-style-type: none"> • Marine Welder • Inside/Outside Machinist • Shipfitter • Rigger 	\$41K - \$68K Yearly	<ul style="list-style-type: none"> • Freight Forwarder • Marine Designer • Longshoreman • HVAC Technician • Welder
<i>Associate's Degree / Certifications or College Coursework & 1-2 Years Experience</i>	<ul style="list-style-type: none"> • <i>Electrical Technician</i> • Mechatronics Tech • CAD/Designer • Marine Maintenance • Instrumentation 	\$17 - \$26 Hourly	<ul style="list-style-type: none"> • Production/Planning Clerk • Crane and Tower Operator
<i>Intensive Training Programs</i>	<ul style="list-style-type: none"> • Certified Welder • Maritime Electrician • Mechanics 	\$15 - \$25 Hourly	<ul style="list-style-type: none"> • Rail-Track Laying and Equipment Operator • Heavy Vehicle Service Tech
<i>High School Diploma or GED</i>	<ul style="list-style-type: none"> • Welder • Helper • Fire Watch 	\$8 - \$15 Hourly	<ul style="list-style-type: none"> • Freight, Stock and Material Mover • Shipping, Receiving and Traffic Clerk



ApprenticeshipUSA



REGISTERED APPRENTICESHIP-COLLEGE CONSORTIUM

RACC

A network of Colleges and Registered Apprenticeship Programs working together to provide college-to-career opportunities

[LEARN MORE](#)

FAQs	FRAMEWORK	STANDARDS OF GOOD PRACTICE
College Members	Apprenticeship Members	Other Members

PATHWAYS TO SUCCESS

EDUCATORS > Provide Apprentices an accelerated	REGISTERED APPRENTICESHIP SPONSORS > A "grow your own" career path	REPRESENTING ORGANIZATIONS > Be on the cutting edge of
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https://www.doleta.gov/oa/racc.cfm





Questions?

The Nuts & Bolts of Work-based Learning Opportunities

- When to place students?
- How to prepare employers as hosts?
- How to organize within your institution?
- How to prepare students for success?
- How do you facilitate good matches?
- What about evaluation?



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<http://www.atecenters.org/ccta>