Webinar Details

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• Please ask questions via the question window
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Brought To You By:

CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE
With Additional Support by the ATE Collaborative Impact Project

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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
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. The 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.
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
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 College evaluate ATE interns work and academic performance. Usually also involves an advisor or ATE staff visiting the 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
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

FY 13 Q4: 375,425
FY 14 Q2: 380,314
FY 14 Q4: 410,375
FY 15 Q2: 420,698
FY 15 Q4: 447,929
What is registered apprenticeship?

Five Core Components of Registered Apprenticeship:

- Employer Involvement
- Structured On-the-Job Learning
- Related Training and Instruction
- Rewards for Skill Gains
- National Occupational Credential
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

- **Current Number of Apprentices**: 456,989
- **New Apprentices in 2015**: 200,000
- **Completed Apprentices in 2015**: 50,000
- **Active Programs in 2015**: 20,000
Regional and National Apprenticeship Partnerships

ATE Centers
Industry
Colleges
Government
High Schools
SMART

CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE
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
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

Virginia Business Recognizes SMART Center and TCC ...

Virginia Business, a leading publication profiling business-related news in the Commonwealth, has recognized t...

Virginia Maritime Association Releases Economic Im...

The Virginia Maritime Association recently released The Economic Impact of Virginia's Maritime Industry - The ...

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...
New "Make the SMART Choice" Campaign

New "Make the SMART Choice" Campaign

SMART Center PI, US Department of Labor Office of Apprenticeship

Virginia Business Recognizes SMART Center and TCC... Virginia Business, a leading publication profiling business-related news in the Commonwealth, has recognized... Virginia Maritime Association Releases Economic Impact Report... The Virginia Maritime Association recently released The Economic Impact of Virginia's Maritime Industry - The...
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Read more.

Virginia Business Recognizes SMART Center and TCC...

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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

Your Maritime and Transportation Industry Career Pathway

- **Step 1: Consider Accelerated Training at Community College**
- **Step 2: Choose Industry Segment**
- **Step 3: Consider Applying for Apprenticeship Program**
- **Step 4: Consider Attending a State or Federal Maritime Academy**

Maritime Transportation Employers
- Shipbuilding and ship repair (shipyards)
- Marine Logistics and Shipping
- Ports/Intermodal Transportation
- Marinas/Pleasure Craft
- Seagoing/Engineers

Work full-time and take courses at a 4-year college to earn a MS/PhD degree in Applied Science, Engineering Technologies, or Leadership

Captain/Chief Engineer/Supervisor
15+ years
$120-150K/yearly

Work full-time and attend TCC part-time, earning additional craft certifications and credits to earn:
- A.A.S. Maritime Logistics
- A.A.S. Business
- A.A.S. Maritime Technologies

Manager/Supervisor/Inspector
5-20 years
$60-92K/yearly

Test to earn national industry credentials:
- DOL - Journeyman-Craftsman Card
- AWS - Certified Welder
- ABYC - Certified Boat, Yacht, Marinas
- MSSC - Manufacturing Certificates

Technician/Journeyperson Specialist/Operator
2-6 years
$17 - $28/hr

Work full-time and attend TCC part-time to earn industry certification and a:
- CSC Marine Electrical
- CSC Marine Mechanical
- CSC Marine Diesel
- CSC Maritime Technologies
- CSC Marine Welding

Entry-Level Worker
0-2 yrs
$14 - $18/hr

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

Most new apprentice graduates earn more than students graduating with a Bachelor’s degree.
## Education in Maritime and Transportation Pays

<table>
<thead>
<tr>
<th>Education/Experience</th>
<th>Maritime Jobs</th>
<th>Pay Range</th>
<th>Transportation Jobs</th>
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</thead>
<tbody>
<tr>
<td>Master's Degree / Bachelor's Degree with Experience</td>
<td>• Industrial Engineer</td>
<td>$75K - $100K Yearly</td>
<td>• Industrial Engineer</td>
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<tr>
<td></td>
<td>• Nuclear Engineer</td>
<td></td>
<td>• Supply Chain Manager</td>
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<td></td>
<td>• Project Supervisor</td>
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<td>• Electrical Engineer</td>
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<tr>
<td></td>
<td>• Electrical Engineer</td>
<td></td>
<td>• Civil Engineer</td>
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<tr>
<td></td>
<td>• Mechanical Engineer</td>
<td></td>
<td>• Captain</td>
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<tr>
<td>Bachelor’s Degree</td>
<td>• Production Manager</td>
<td>$60K - $90K Yearly</td>
<td>• Transportation Manager</td>
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<td></td>
<td>• Health &amp; Safety Inspector</td>
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<td>• Distribution Center Supervisor</td>
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<td></td>
<td>• Logistics Manager</td>
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<td>• Ports Logistician</td>
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<tr>
<td>Registered Apprenticeship / Journeyman</td>
<td>• Marine Welder</td>
<td>$41K - $68K Yearly</td>
<td>• Marine Designer</td>
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<td></td>
<td>• Inside/Outside Machinist</td>
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<td>• Longshoreman</td>
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<td>• Shipfitter</td>
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<td>• HVAC Technician</td>
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<tr>
<td></td>
<td>• Rigger</td>
<td></td>
<td>• Welder</td>
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<tr>
<td>Associate’s Degree / Certifications or College Coursework</td>
<td>• Electrical Technician</td>
<td>$17 - $26 Hourly</td>
<td>• Production/Planning Clerk</td>
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<tr>
<td>1-2 Years Experience</td>
<td>• Mecatronics Tech</td>
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<td>• Crane and Tower Operator</td>
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<td></td>
<td>• CAD/Designer</td>
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<td></td>
<td>• Marine Maintenance</td>
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<tr>
<td></td>
<td>• Instrumentation</td>
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<tr>
<td>Intensive Training Programs</td>
<td>• Certified Welder</td>
<td>$15 - $25 Hourly</td>
<td>• Rail-Track Laying and Equipment Operator</td>
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<td></td>
<td>• Maritime Electrician</td>
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<td>• Heavy Vehicle Service Tech</td>
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<td></td>
<td>• Mechanics</td>
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<tr>
<td>High School Diploma or GED</td>
<td>• Welder</td>
<td>$8 - $15 Hourly</td>
<td>• Freight, Stock and Material Mover</td>
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<tr>
<td></td>
<td>• Helper</td>
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<td>• Shipping, Receiving and Traffic Clerk</td>
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<td>• Fire Watch</td>
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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?
Contacts

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http://www.atecenters.org/ccta