

Dr. Latitia McCane Director Education









The Apprentice School

- Founded in 1919
- Accredited since 1982; Council on Occupational Education
- Key pillars: Craftsmanship, Scholarship, & Leadership
- Current enrollment: 8 students; average age is 25
- 34.06% minority, 17.14% women, and 7.89% are veterans
- "Tuition free" educational experience









Recruitment

- Compete for students in a society where the educational system is biased towards college
- Present ourselves as a school and a unique alternative to college
- Offer real world experience and education with a purpose
- Stress the opportunity to work on some of the most complex and technically advanced products in the world
- Pre-Apprenticeship is allowing us to grow our own pipeline







The Apprentice School – What We Do

- Contribute to the profitability and growth of Newport News Shipbuilding
- Provide Newport News Shipbuilding with a continuous supply of high performing leaders
- Produce a diverse pool of graduates who possess core leadership principles and a high degree of engagement







The Campus







Edge



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Total Private Investment	\$30,000,000
Commercial / Retail	7,000,000
Housing	23,000,000

State:

School

\$25,000,000

(Capital investment, excluding financing costs)

Public (City of Newport News):

 Land Acquisition & Contributed Land
 \$ 4,500,000

 Parking Deck
 11,500,000

 Public Infrastructure
 2,000,000

 Total Public Investment
 \$17,000,000

Total Public/Private Investment

\$72,000,000





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Admission Requirements

- High school graduate
- United States Citizen
- Ability to obtain a security clearance
- Ability to perform the duties of the occupation
- Complete medical and drug screen

Algebra I	Algebra II
Geometry	Advanced Math
Principles of Technology	Mechanical Drawing
Chemistry	Physics
Vocational/Technical Education or Computer Science	

- * Minimum of (4) courses required
- Candidates have a strong background in math and science





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Admissions Profile

- Rolling admissions; Apprentices start every other month
- Generally hire 200 apprentices annually
- Averaged 3,000 applications a year for the past four years
- Selection ratio is 10:1





Craftsmanship

- Apprenticeships are offered in 19 trades and nine optional programs
- Delivered by a staff of seven lead instructors; 70 craft instructors
- All craft instructors are Apprentice School graduates
 - Full production responsibilities; critical assignments
 - $_{\odot}$ Responsible to train apprentices and teach trade theory
 - Monthly craft performance evaluations (shop grades) and coordinate rotations







Scholarship

- Highly accomplished faculty includes:
 - 15 academic faculty
 - Nuclear and Non-nuclear Engineering
 - Naval Architect and Marine Engineering
 - $\circ~$ Military and business backgrounds







Scholarship

- World Class Shipbuilder Curriculum (Delivered by academic instructors during first year experience)
- Trade Related Theory (Delivered by craft instructors throughout apprenticeship)
- Made Application to State Council of Higher Education in Virginia (SCHEV) to award AAS Degrees
- Advanced Curricula (2nd 5th year experience for Pre-advanced & Advanced Programs)
 - AS degree in Engineering
 - $\circ~$ AS degree in Business Administration
 - AAS degree in Engineering Technology
 - $_{\odot}\,$ AAS degree in Technical Studies
 - BS degree in Modeling and Simulation, Mechanical or Electrical Engineering (Years 6-8)
 - * (AS/AAS are in partnership with Thomas Nelson and Tidewater Community Colleges)
 - * (BS is in partnership with Old Dominion University for the Marine Engineering apprenticeship)





Agreements and Relationships

- Close working relationships with:
 - Old Dominion University, Frank Batten College of Engineering
 - College of William & Mary, Mason School of Business
 - Webb Institute
 - Thomas Nelson Community College
 - Tidewater Community College
- Articulation agreements with nine colleges and universities, including recent agreements with Hampton University, Paul D. Camp CC and Rappahannock CC.







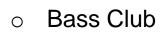
Strong Emphasis on Leadership

- iLEAD Program benchmarked at the U.S. Naval Academy
- The Apprentice School Leadership Experience at The College of William and Mary
- Frontline Foreman Accelerated Skills Training
- Six Division III level sports
- Student Organizations
 - o Student Government
 - Society of Manufacturing Engineers
 - Society of Naval Architects and Marine Engineers





- National Society of Leadership & Success
- Engineering & Robotics Club
- \circ Jaycees







Student Services

- 1st Year Experience
 - \circ Housing
 - Welcome and navigation
 - Academic orientation
- Academic Advising & Grade Monitoring
- Leadership Seminars & Social Events

- Workshops
 - $_{\odot}$ Buying Your First Home
 - Personal Finances
 - Dining Etiquette
- Graduate Resource Center
 - Career development
 - \circ Resume writing
 - Job placement







Student Experience Snapshot

- Apprentices Starting Today...
 - Starting Pay \$18.32/hour
 - Pay increases every 90 days for the first 1 ½ years
 - Pay increases every 6 months for the remainder of apprenticeship
 - Completion pay rate of \$28.86/hour (\$62k annually)
- Benefits start after 90 days

- Tuition-free experience
- Textbooks provided
- Academics on the clock
- Real life experience building complex products

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No service agreement







Student Experience Snapshot

Apprentice School Grad	College Grad
\$325,000 Scholarship (includes benefits, earnings while in school, tuition, books and fees	Average \$37,000 student loan debt
Earnings of approximately \$197,000 (includes earnings while in school)	Incidental income during college
4-5 years work experience leading to Associates & Bachelor degrees	Bachelor degrees with little to no work experience







"The Apprentice School is the backbone of our Company."

C. Mike Petters President and Chief Executive Officer Huntington Ingalls Industries



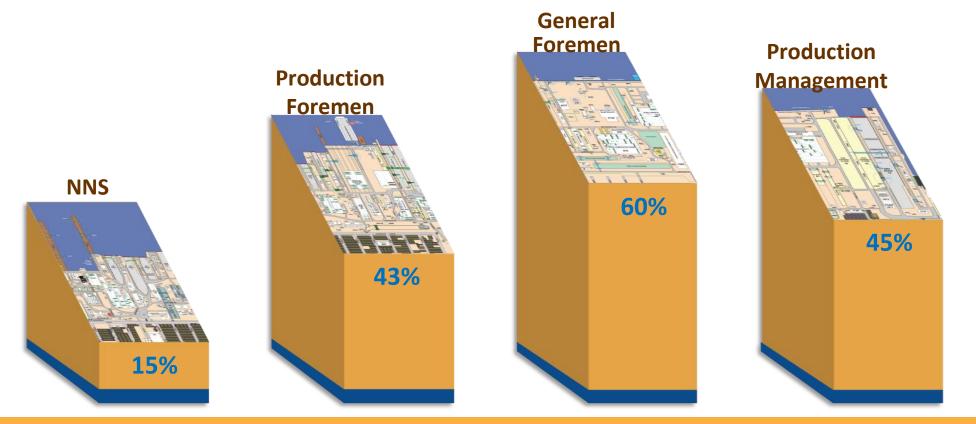






Impact

77% of alumni remain with the company ten years after graduation







Youth Builders Pre-Apprenticeship Program

- Piloted Fall 2019
- Partnership with New Horizons Regional Education Center
- 11 Pre-Apprentices from 9 area high schools from 5 school districts
- Enrichment in
 - Math
 - Trades Skills
 - Student Success
- Apprentice Mentors









Youth Builders Cohort I











Newport News Shipbuilding

A Division of Huntington Ingalls Industries









Thank You!

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

Session No: WS/21 GROWING NEXT GENERATION LEAN LEADERS – APPRENTICE SCHOOLS SHAPING THE FUTURE Dr. Latitia McCane Director Education HII



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