

Maritime Security Summer Research Institute

Beth Austin-DeFares

Stevens Institute of Technology, USA

Julie Pullen

Stevens Institute of Technology, USA

Barry Bunin

Stevens Institute of Technology, USA

EXECUTIVE SUMMARY

In its efforts to respond to national workforce imperatives and central to its mission as a Department of Homeland Security (DHS) Center of Excellence in Port Security, the Center for Secure and Resilient Maritime Commerce (CSR), led by Stevens Institute of Technology, has created an intensive summer research program tailored to undergraduate and graduate-level students. The Summer Research Institute (SRI) is designed to engage multidisciplinary student teams in rigorous, hands-on research in collaboration with the Center's researchers and industry and government partners. The research fields include maritime security, remote sensing technologies, emergency response and management, and Marine Transportation System (MTS) resilience. The program aims to enhance the professional development of students while increasing their interest in advanced academic study and careers in the maritime/homeland security domain.

ORGANIZATION BACKGROUND

In 2008, Stevens Institute of Technology was designated as the lead university in the National Center for Secure and Resilient Maritime Commerce (CSR), a Department of Homeland Security Center (DHS) of Excellence (COE) in Port Security. CSR is one of two DHS centers (the other is led by the University of Hawaii) that together form the National Center of Excellence for Maritime, Island, Remote and Extreme Environment Security (MIREES). The Center supports DHS efforts to provide for the safe and secure use of the nation's maritime domain and a resilient Marine Transportation System (MTS), through the advancement of the relevant sciences and the professional development of the current and prospective maritime security workforce.

Central to CSR's mission is the transfer of its research and expertise into innovative educational programs designed to enhance maritime domain awareness and MTS resiliency, and the interest, knowledge, technical skills and leadership capabilities of the nation's current and future maritime security workforce.

Since the Center's inception, CSR in collaboration with its academic partners, Stevens Institute of Technology, Rutgers University, University of Miami, University of Puerto Rico–Mayaguez (UPRM), Massachusetts Institute of Technology (MIT) and Monmouth University, have worked together to develop a comprehensive portfolio of maritime security-centric educational programs. These include:

- The Summer Research Institute,
- Professional development programs, seminars, and certificates tailored to maritime security practitioners,
- The Maritime Systems Master's Degree program, including the DHS-funded Maritime Systems Master's Degree Fellowship program.

CSR leverages the existing programs, research assets and teaching talents of its academic partners to develop, support and deliver the Center's educational programs. Committed to advancing the Center's educational portfolio and outreach to current and prospective maritime/homeland security practitioners, CSR hired a full-time Director of Education in 2010 to coordinate and evolve its programs.

To date, the Center has successfully delivered multiple professional development courses and seminars to stakeholders, it has been awarded three consecutive DHS Career Development Grants to support nine full-time students in Stevens Institute of Technology's Maritime Systems Master's Degree program and has engaged 70 high-achieving engineering and science students from 16 U.S. universities in its Summer Research Institute.

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